

# C h a p t e r 7

## D E S I G N

## D E V E L O P M E N T



APPLICATION / VIRTUALIZATION / PROCESSING / HACKING



## 7 . 1 I N T R O D U C T I O N

Chapter 7 is an account of the design development process throughout the duration of the dissertation project. It starts off with a summary of all the main design informants; following this is an investigation of the augmentation of the existing built fabric on the GPW block, which is based on the site analysis in Chapter 4. Thereafter is an explanatory programmatic masterplan for the block to explain how the different programmes function together. In the next section the various theoretical premises (as discussed in Chapter 2) are translated to spatial design strategies by means of supporting case-studies and then follows the design development process work as well as the main design iterations throughout the year. The chapter concludes with the final design drawings and documentation.

- SUMMARY OF DESIGN INFORMANTS
- SITE INVESTIGATION (IN ITS EXISTING CONDITION)
- STRIPPING BACK PROCESS
- SITE INVESTIGATION (AFTER STRIPPING BACK PROCESS)
- PROGRAMMATIC MASTERPLAN
- PROCESS-WORK
- ITERATIONS
- FINAL DESIGN



## 7.2 SUMMARY OF MAIN DESIGN INFORMANTS :



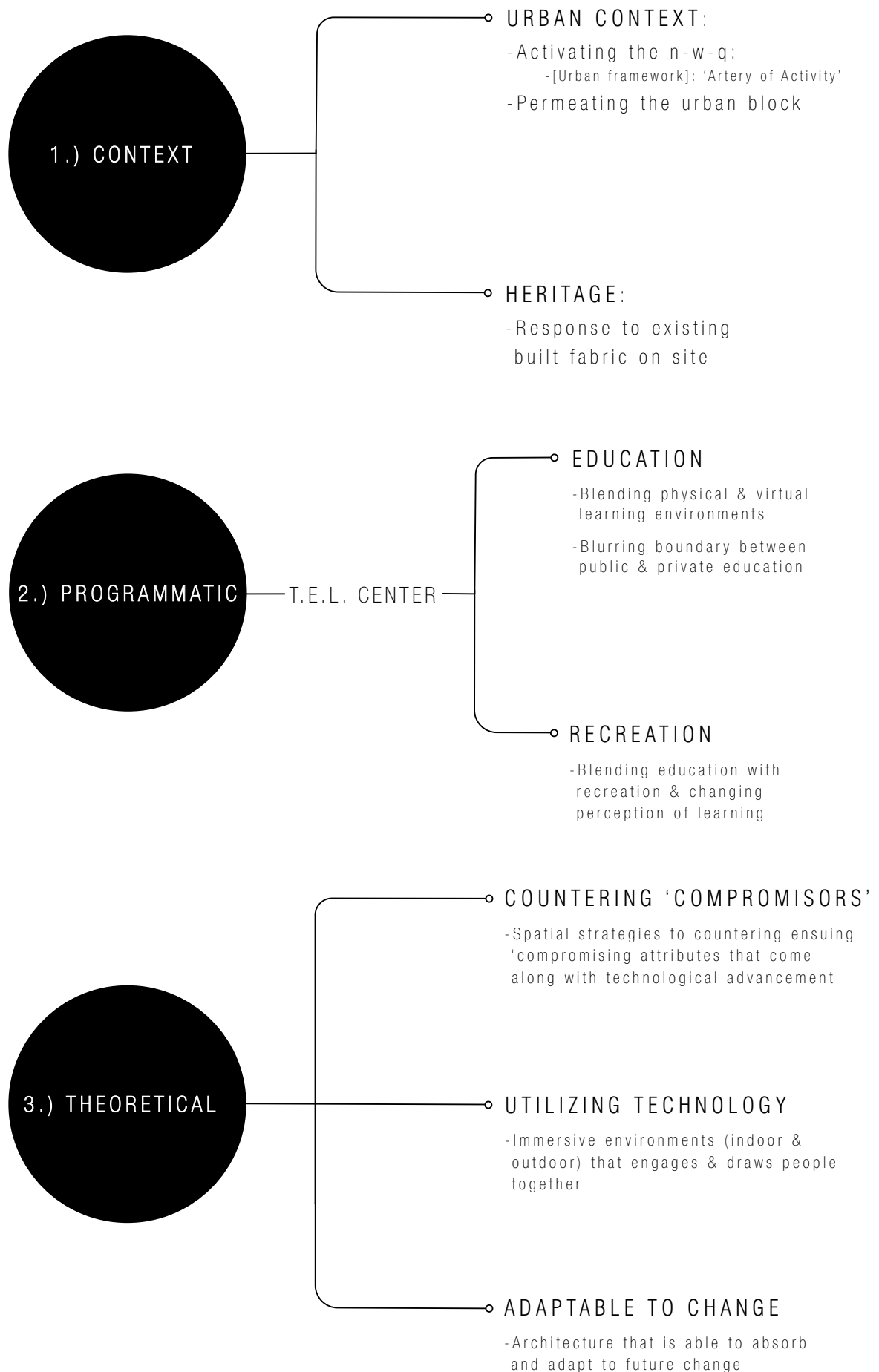
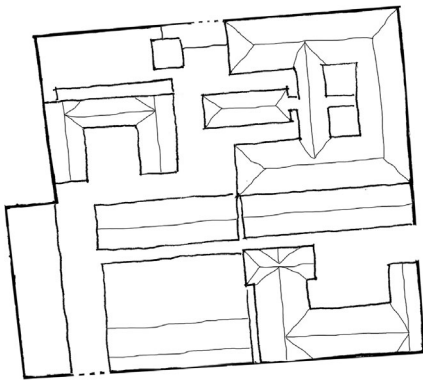


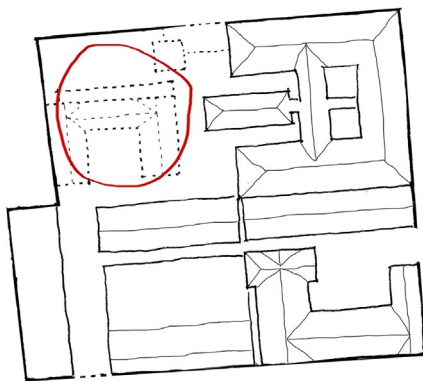
Figure 7.1: Summary of design informants (Author, 2016)

### 7.3 SITE INVESTIGATION (IN ITS EXISTING CONDITION)

As recounted in the statement of significance for the block as a whole (see section 3.5.3), the existing condition is one of overcrowding, and buildings seem as though they are almost 'compressed' together (as if they do not have space to 'breathe'). This in turn causes disconnectedness between certain parts; in particular, the most important part (or the part with the most architectural and cultural value, see 'grading of architectural significance', section 3.4.10) which is the 1896 Wierda-building on the south-eastern corner. De Villiers and Clarke (2015: 97) note that "the relatively small building on the corner of the urban block is overshadowed by recent and senseless development of the urban tissue". The following is an investigation of various strategies of how this 'compression' and 'disconnectedness' can be solved:

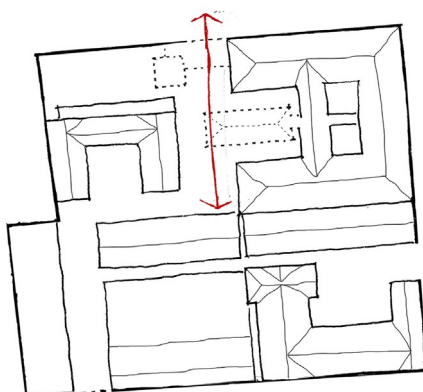


GPW block in its existing condition



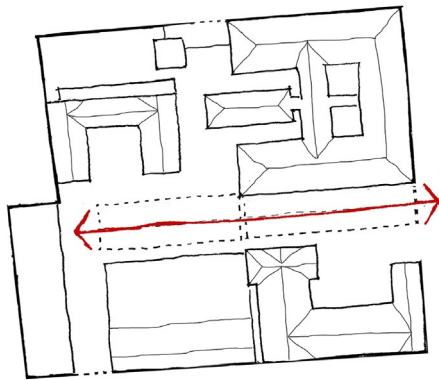
Maintenance offices and security office (at main entrance) omitted:

- Results in new open quadrant with the possibility of new, densified development appropriate to the context



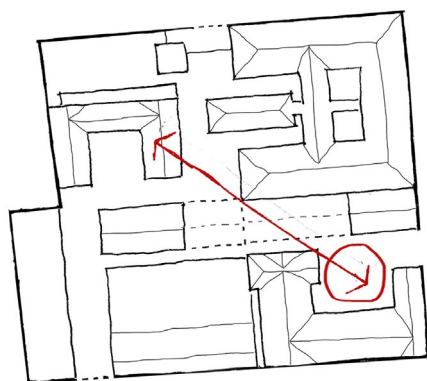
Protruding segment of administration building and security office (at main entrance) omitted

- Unobstructed movement line, semi-courtyard for administration building



Two longitudinal buildings (Litography and Letter Press) omitted

- Open movement line (east-west but results in ill-defined entrance at Wierda-building and movement on western side hits dead end

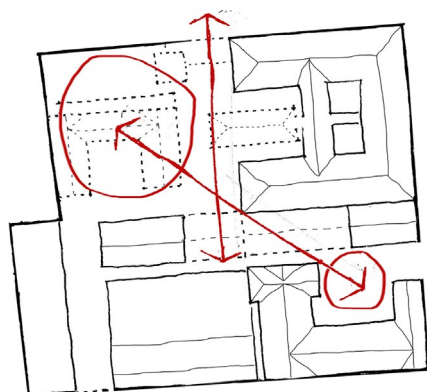


Two longitudinal buildings (Litography and Letter Press) partially omitted (Possible due to cross-beam and column structure)

- Connecting Wierda-building courtyard to centre of site

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### CONCLUSION OF INVESTIGATIVE ANALYSIS:



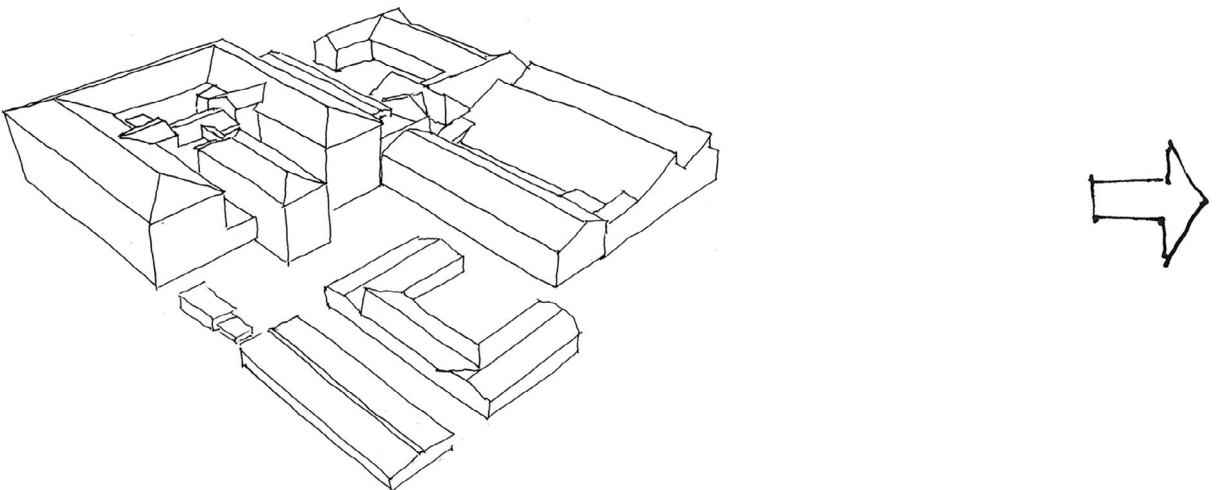
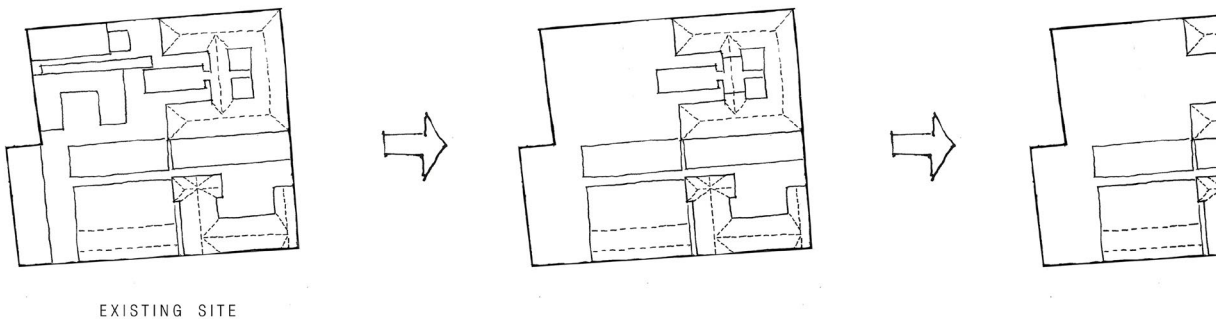
Protruding segment of administration building, maintenance, security offices omitted. Letter-Press and Litography partially omitted

- New open quadrant, existing Wierda-building courtyard connected to site, administration building - new semi-courtyard, two movement axes across block

## 7.4 'STRIPPING BACK'

In light of this site investigation in 7.3 as well as the 'grading of architectural significance' of the existing buildings on the GPW block (section 4.4.10), a stripping back process was conducted on the block whereby certain buildings (or segments of buildings) were fully or partially omitted. Only the buildings on the lower grading of significance were edited; those on the higher end (Wierda and saw-tooth) remained in their existing state. The end result ('new building ground') is one in which the most valuable (Wierda) building's previously obstructed facade is opened up and the building as a whole is connected to the rest of the block.

Stripping back: '*Selective, strategic subtraction*'



In addition, the buildings can 'breathe' and have a better urban and contextual relationship (with regard to the strategies discussed in Chapter 3, section 3.5, about the 'strategic rupture' and organic composition of a city-block). Furthermore the administration (north-west corner) building has gained a central courtyard, and there is an open quadrant on the north-western side in which an appropriate, urban and contextually-responsive intervention can occur which will further enhance the spatial potential of the city-block as a whole.

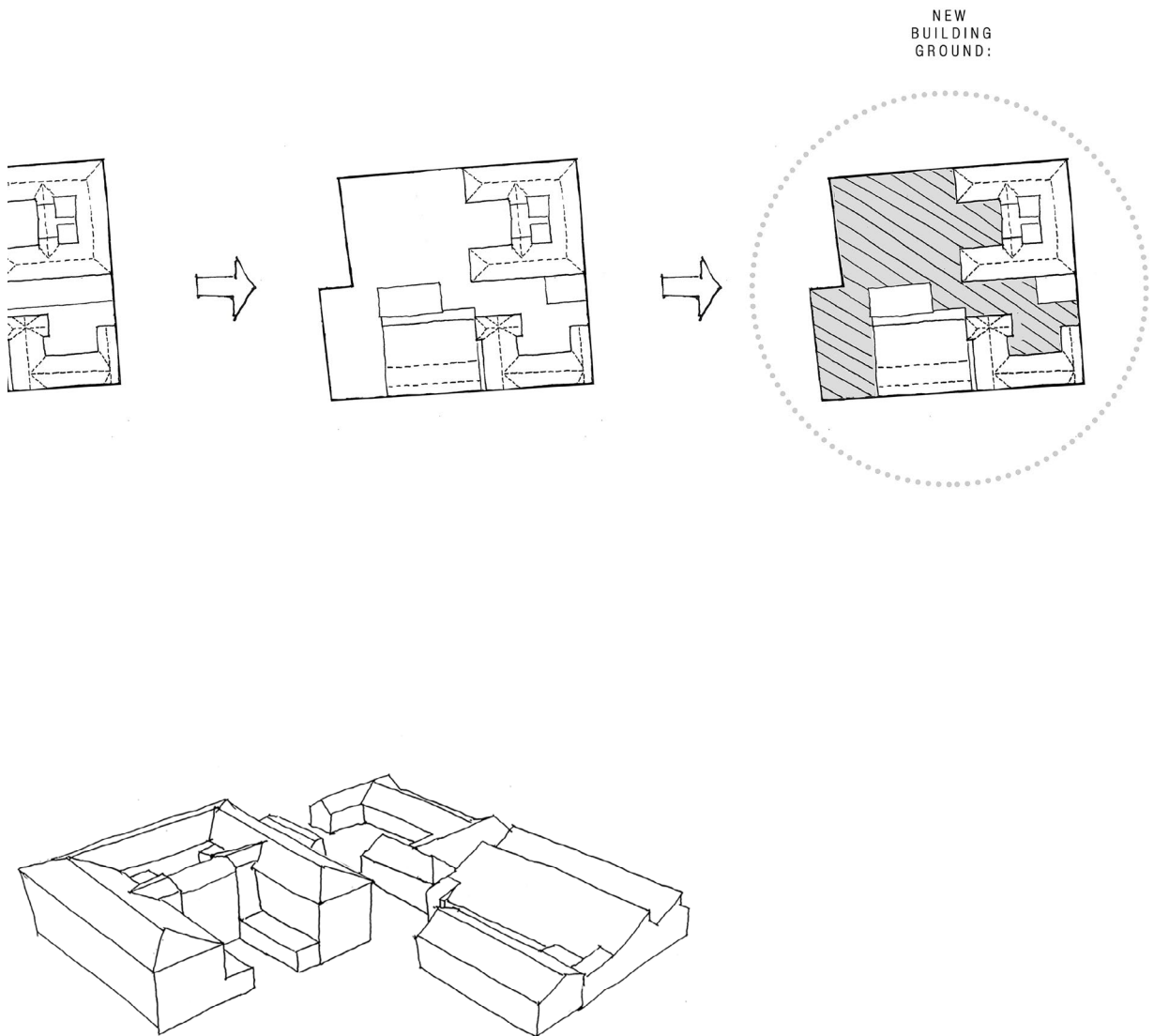


Figure 7.2: 'Stripping back'

## 7.5 SITE INVESTIGATION (AFTER STRIPPING BACK PROCESS)

After the stripping back process it is clear that two of the remaining U-shaped building's (Administration - and Wierda-buildings) urban role is one of 'framing public space'. This suggests a similar spatial strategy for a new built mass in the north-western quadrant of this block. Another U-shaped or perhaps L-shaped building in this area (Fig 7.3) will fill in the 'toothless gap' and complete the intrinsic DNA (of 'framing space') of this block.

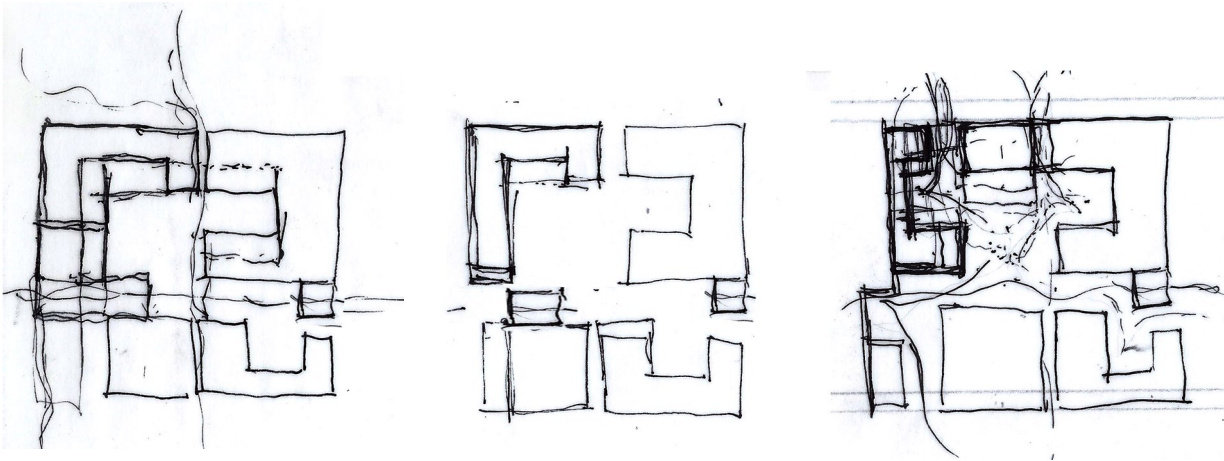


Figure 7.3: 'Completing the whole' (Author, 2016)

In line with the idea of 'strategic rupture' and 'expanding space for public city life' (see section 3.5) to the centre of the block, the movement patterns are an essential design consideration. As illustrated in the urban framework proposal (Fig 3.29), the main pedestrian movement in this area is in a diagonal north-west - south-east direction (between Belle Ombre station and city-centre); the main route of movement through this block should therefore accommodate this broader urban consideration.

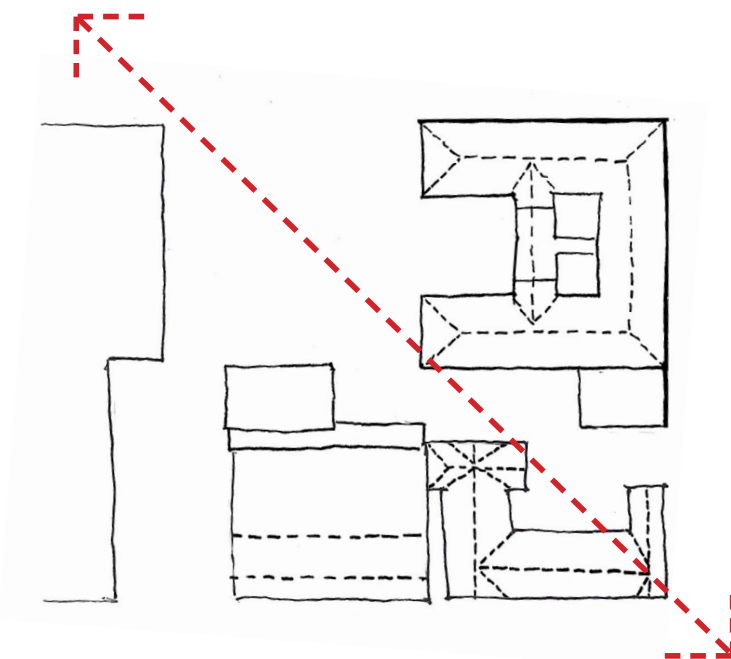
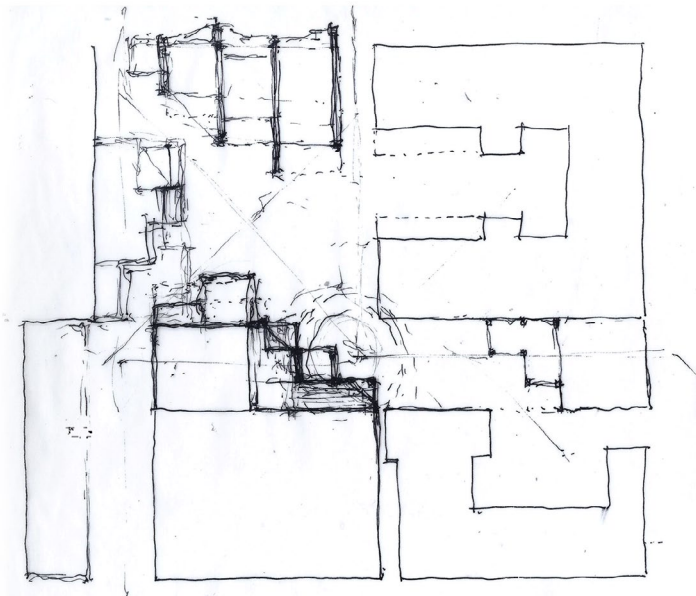
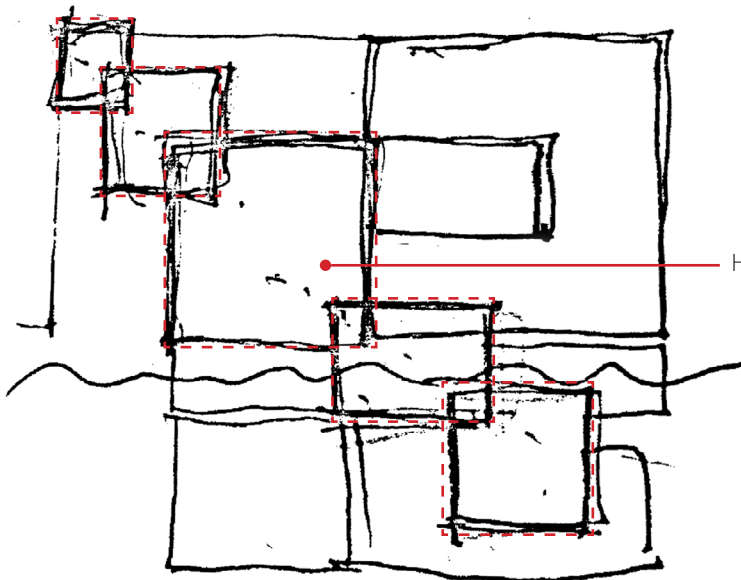


Figure 7.4: Main pedestrian movement direction diagonally across block (Author, 2016)

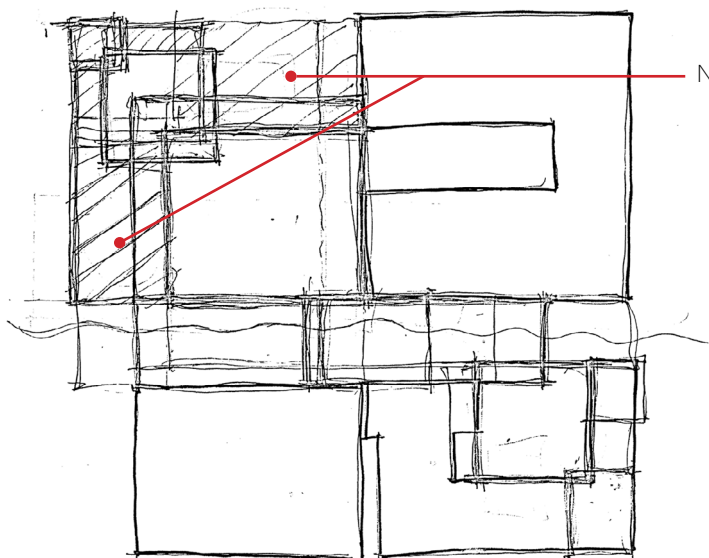




The new open 'building ground' presents a range of urban spatial opportunities in line with the 'strategic rupture' of a city block (as discussed in Chapter 3, Section 3.5). Figure 7.5 illustrates some of the spatial exploration in which a network of linked negative spaces in the block emerges. This network also constitutes a spatial hierarchy in the resultant open negative spaces.



Hierarchy of negative spaces



New building masses to 'frame central public space'

Figure 7.5: Spatial exploration for block as a whole (Author, 2016)

Figure 7.6: Spatial structure for block as a whole (Author, 2016)

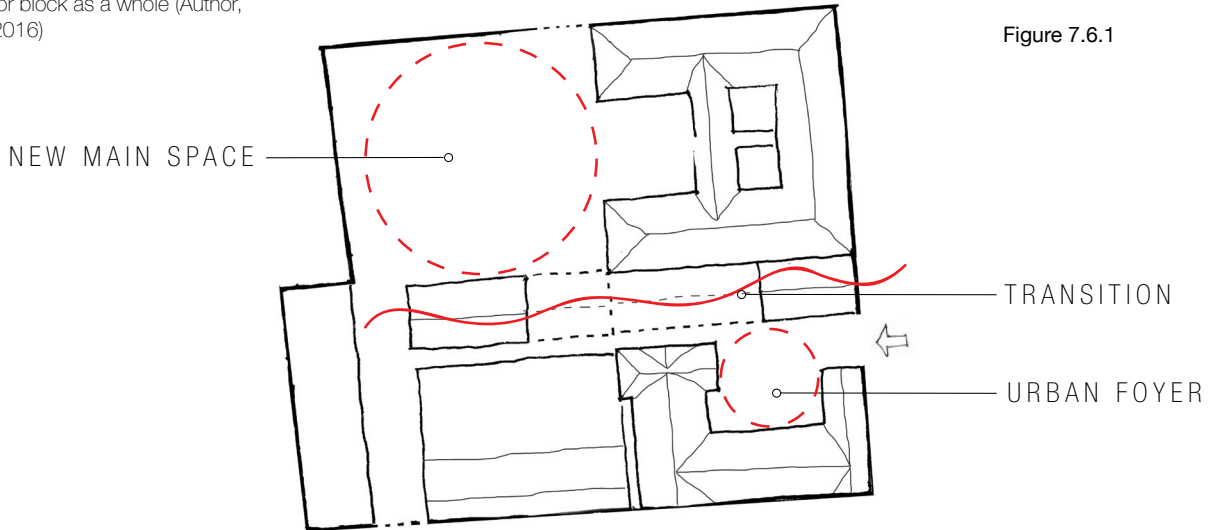


Figure 7.6.1

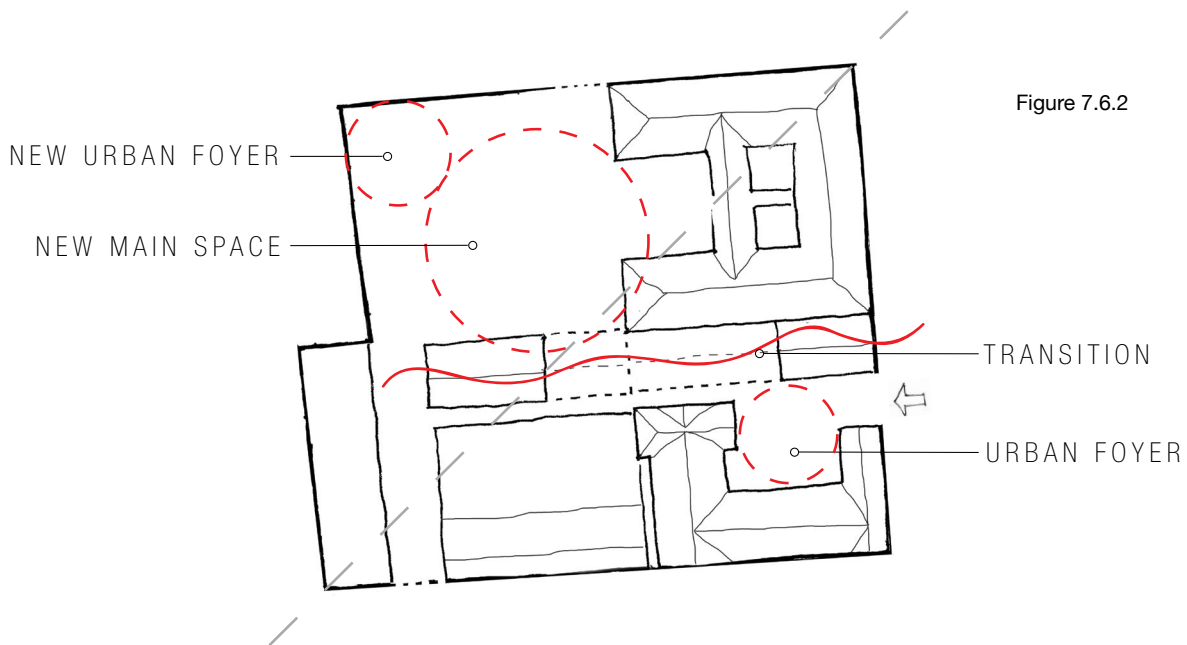


Figure 7.6.2

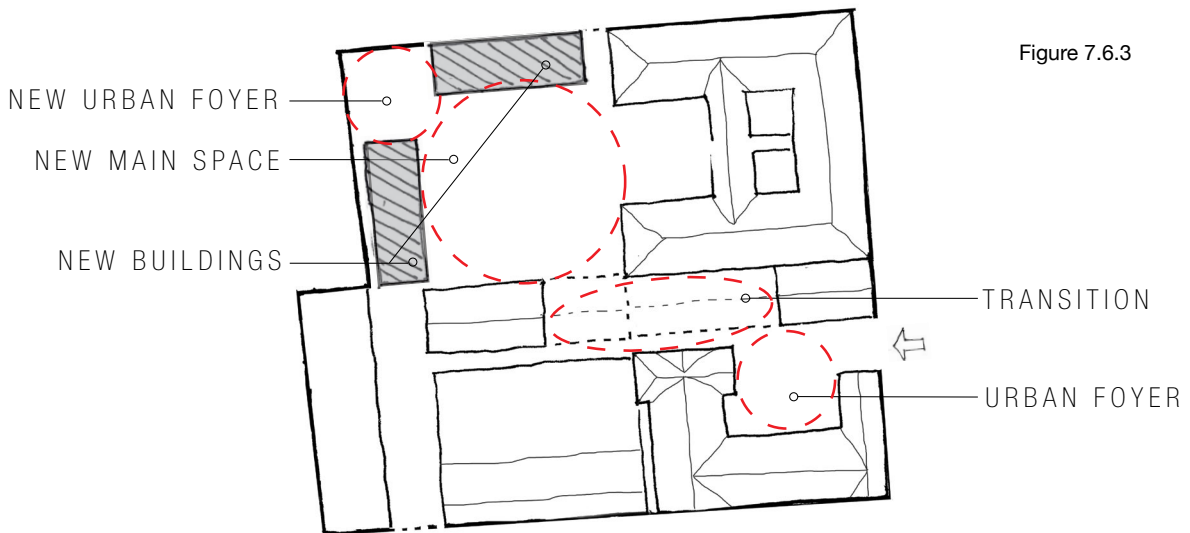


Figure 7.6.3



If one considers the overall nature of the open, negative spaces in the block, the particular space framed by the Wierda building can be regarded as an 'urban foyer' to the rest of the block (see Fig 7.6.1). The newly-opened main space is the central core negative space to which all the other parts connect. The longitudinal open space between the two acts as a transitional corridor that interconnects these two.

In response to this existing nature of negative spaces in the block, the 'urban foyer' is diagonally mirrored to the north-western quadrant (Fig 7.6.2), as a new point of arrival from the north-western direction. This extends and 'completes' the series of interconnected negative spaces in the diagonal line of movement.

In order to achieve this 'mirrored urban foyer', the new building's role also becomes one of 'framing public space', framing the foyer, and also framing, or more accurately, defining the main central square (Fig 7.6.3).

## 7.6 PROGRAMMATIC RELATIONSHIPS IN CONTEXT

Figures 7.7 and 7.8 illustrate the programmatic relationships of the new proposed uses for the existing as well as the new buildings on the GPW site. The contextual relationships are analysed according to the context analysis in Figure 4.3, which is on a scale from *community-oriented* to the west and more to *institutional* towards the east. The proposed programmatic usage for each building is a response to the surrounding context; the administration building (on the north-eastern corner) is a neighbouring extension of the DPW (across the street to the south-east) office space. Furthermore this building can also be utilised by them for archive space, as their archive is an ever-growing accumulation of data, documentation and goods.

The intention for the saw-tooth-building is still one of light-industry production as this building is highly suited to such a function (see section 4.4.6 in Chapter 4). In the spirit of technological advancement this building will house a production facility that includes 3D printers, lasercutters, holographic projectors and so forth; these methods of production will change over time as technology advances. The intention is that it will be a service run and used by the DPW but will also be extended to public use as a production service.

With regard to an adaptive reuse strategy for the 1896 Wierda building, notes are taken from the heritage research lab done by the University of Pretoria's architecture department (specifically the 2014 honours programme) and captured in the publication *RE-CENTRING TSHWANE Urban heritage strategies for a resilient Capital (2015)*. The following are suggestions from this publication:

- Clarke and de Villiers (2015: 97) suggest that the “physical structure is easily adaptable and its position in the city lends itself to a more public function that subverts the ‘private’ governmental control that this site has embodied for decades”.
- Clarke, Kuipers and Swart (2015: 115) advocate a mixed-use (semi-)public programming to “generate a new urban energy, which would spill out beyond the complex”, saying that the GPW has a “relatively great tolerance for change (particularly inside), and holds the most potential for a mix of cultural, civic and commercial activities” (2015:115).
- Clarke and de Villiers (2016: 97) suggest “sensitively repurposing the interior spaces of the GPW and its outdoor courtyard, while drawing pedestrian energy in from the street”.
- They also suggest a programme that is related to the “daily or mundane rituals of life” and that “the GPW can become a place to go and meet, a place with great a

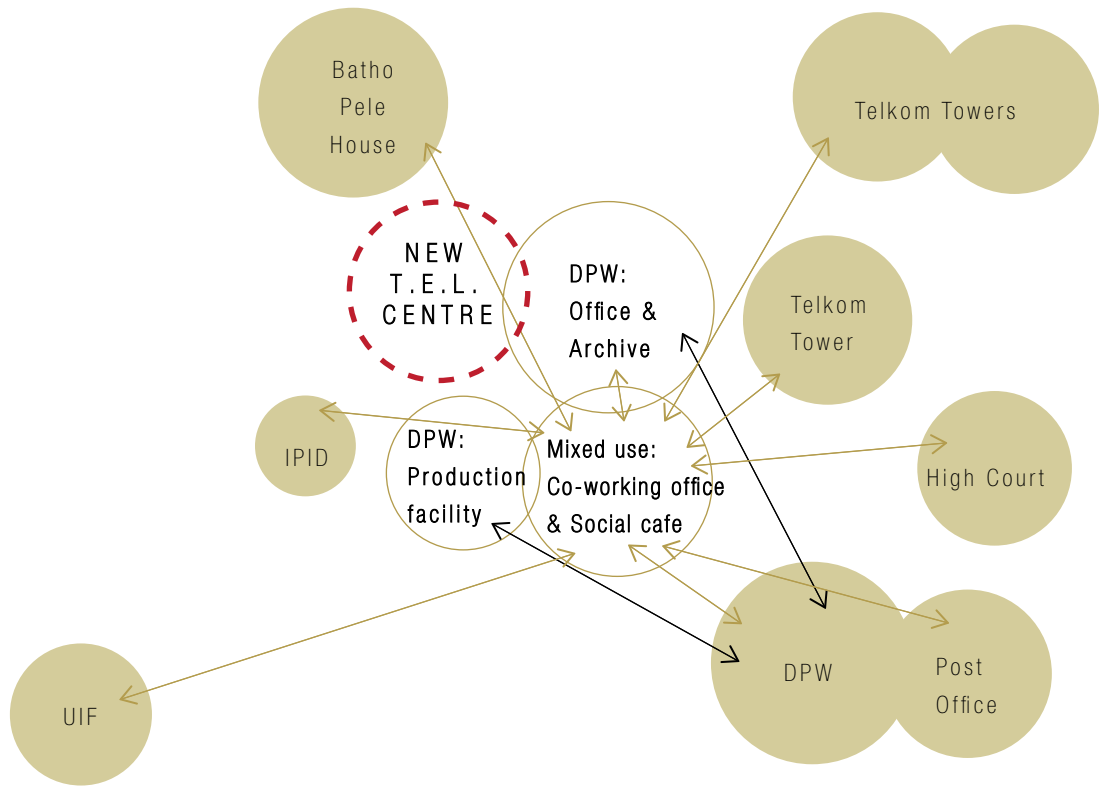
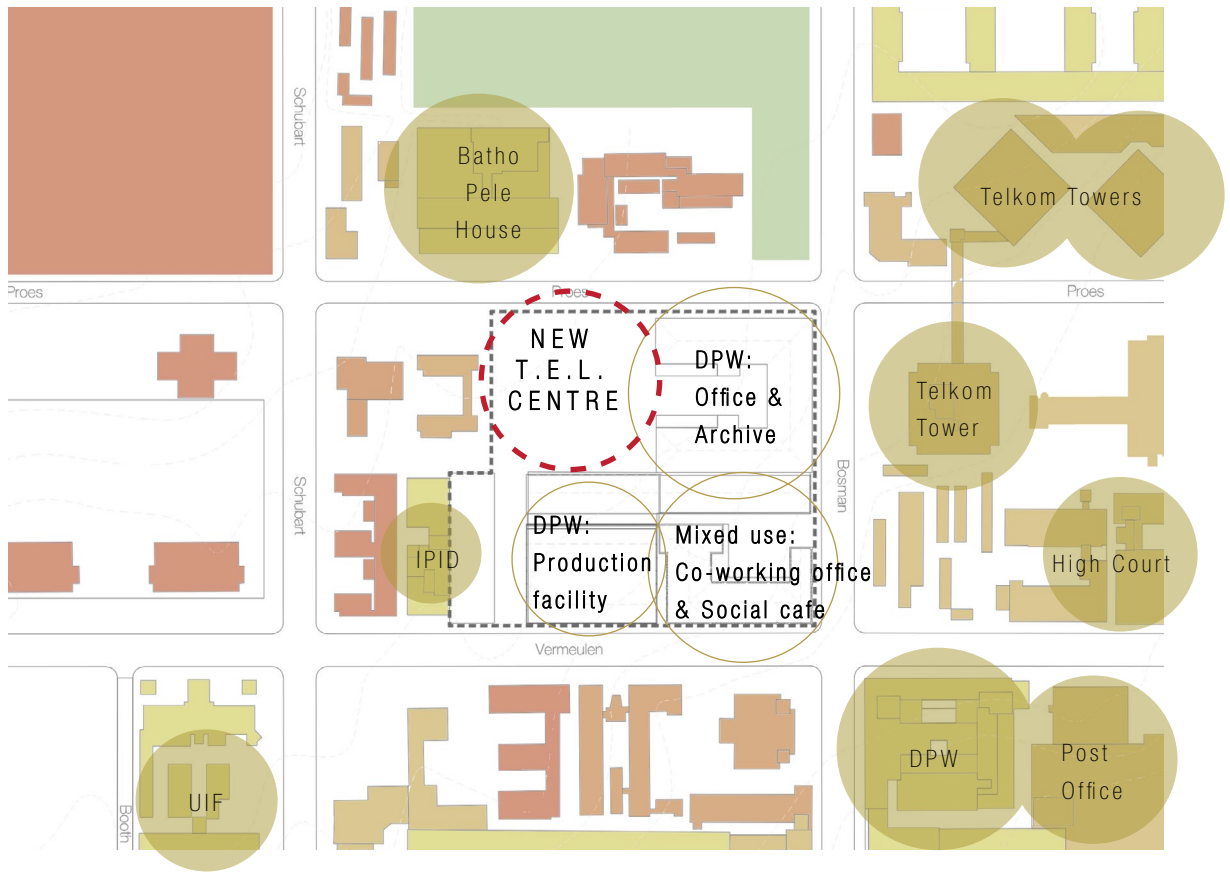


Figure 7.7: Programmatic context - Institutional

intangible value” (2015:97) saying that “by enhancing ‘ordinary’ city life, the vulnerable heritage (under pressure by recent inner city development) is taken seriously, but giving it new life and new purpose for a new generation and society will allow the site to evolve in future” (2015: 97).

In light of these suggestions and also in response to the technology-induced compromisor number 2 (loss of work-life balance - how technology brings an inroad of work-life into one’s personal ‘home-life’ (as discussed in Chapter 2), the currently unoccupied Wierda building is converted to a co-working office space. As recalled in section 2.1.4.2, this programme provides the option of a workplace and the daily routine of ‘going somewhere to work’ and coming home for personal life, but does not keep one to the confines of the same office each day. It is especially targeted at all the institutional and corporate office buildings in the surrounding context (mainly to the east) for office workers to have an alternative place to work when they want to take a break from their conventional office, a place to have their business meetings, eat lunch or socialize after work. It is also targeted towards freelance-professionals who typically work from home but still want a daily routine of going somewhere to work.

The ‘coffice’-owner ‘wins’ because his tables are always full, and the professional wins because he only has to rent a table and wifi-connection instead of the walls, floors and furniture of a traditional office - and his work-life-balance can be reclaimed. The intention of such a programme is also to blur the boundaries of social and work (making the idea of ‘working’ fun) - if one desires it - by working alongside new people each day and offering collaborative interaction between people from different backgrounds, cultures and professions.

As discussed in Chapter 5, the new building in the north-western quadrant of the site constitutes a T.E.L. (Technology-Enabled-Learning) Center which is a public service equipped with various newly emerging technologies that enable the user to gain knowledge in a much more efficient and personalized manner. This programme is in response to a contextual understanding that is very community-oriented mainly to the west of the site. This programme also evolved from a distillation of the intangible heritage intrinsic to the GPW block, which is about the *gathering, producing and distribution of knowledge* (as illustrated in Figure 4.25).

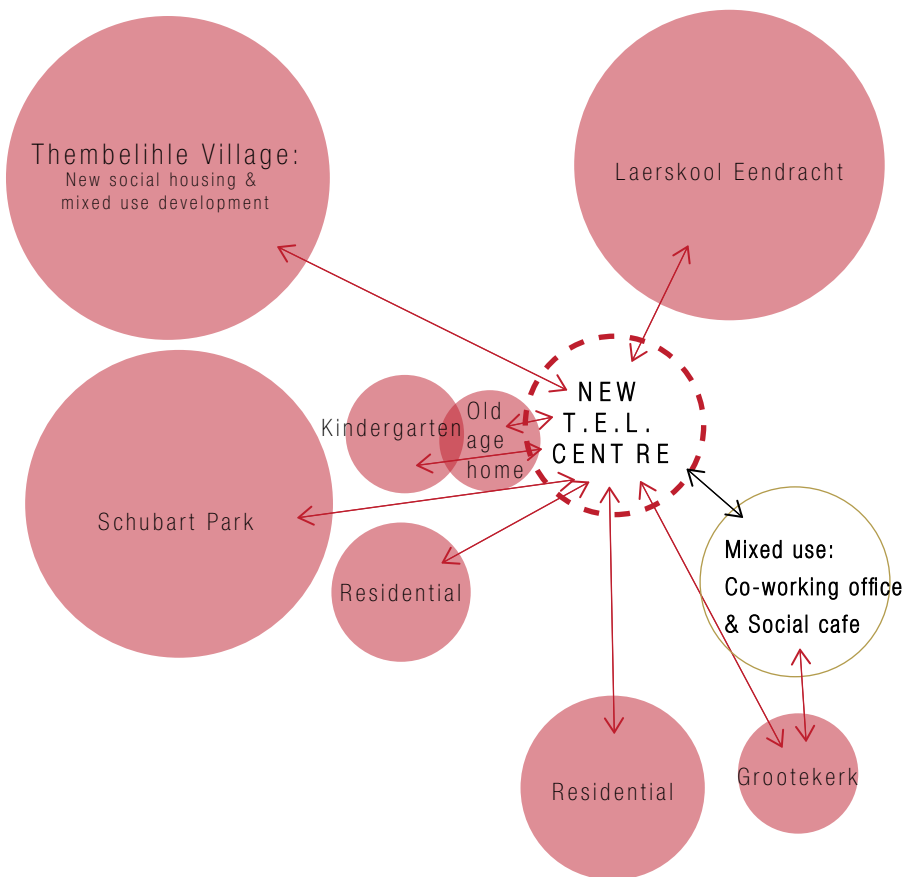
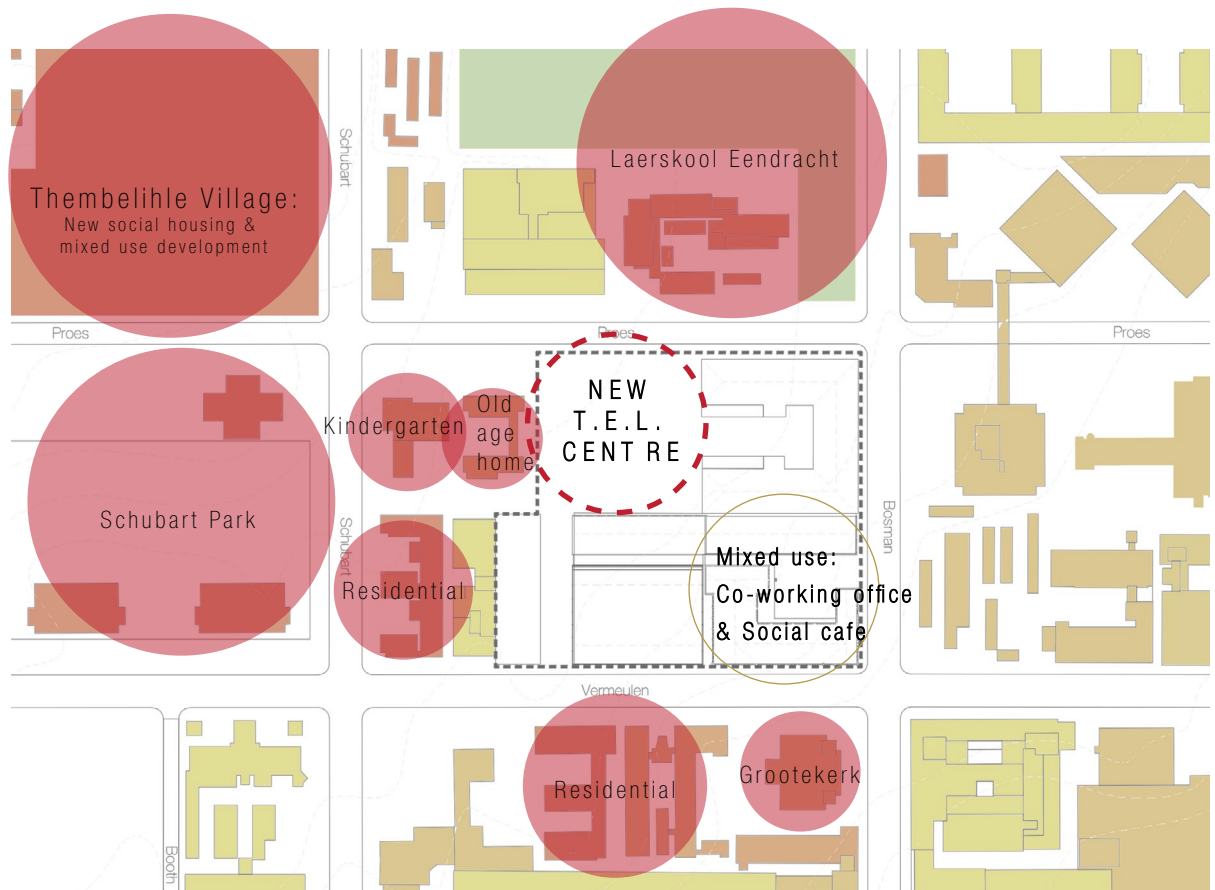


Figure 7.8: Programmatic context - Community-oriented

# ‘ Translation ’ of intangible heritage

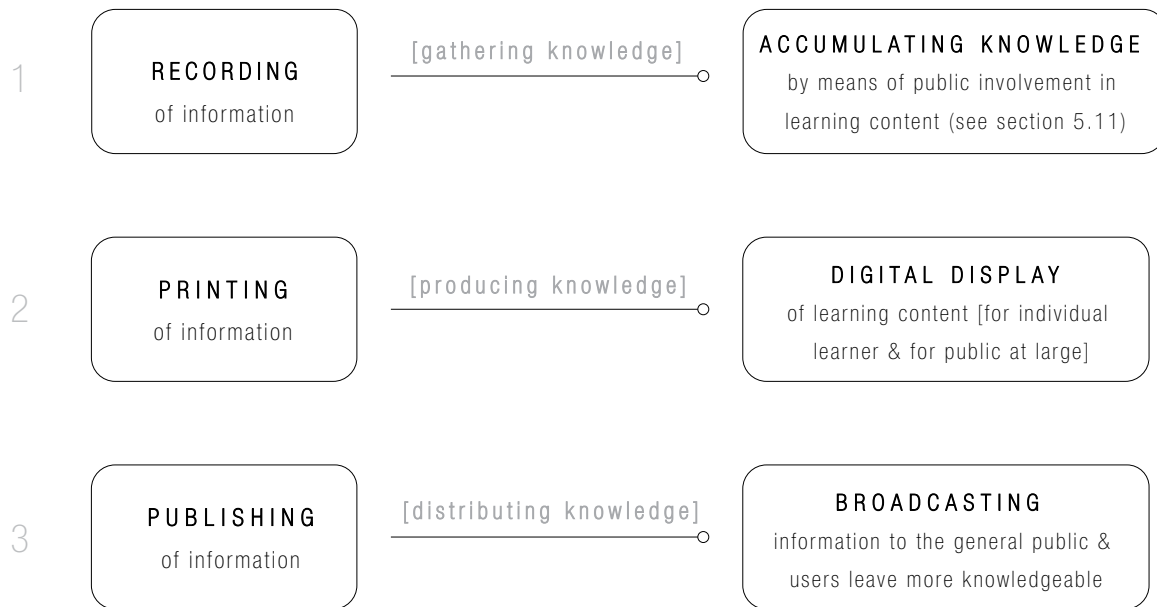


Figure 7.9: Translation of intangible heritage (Author, 2016)

## 7.7 PROGRAMMATIC MASTERPLAN

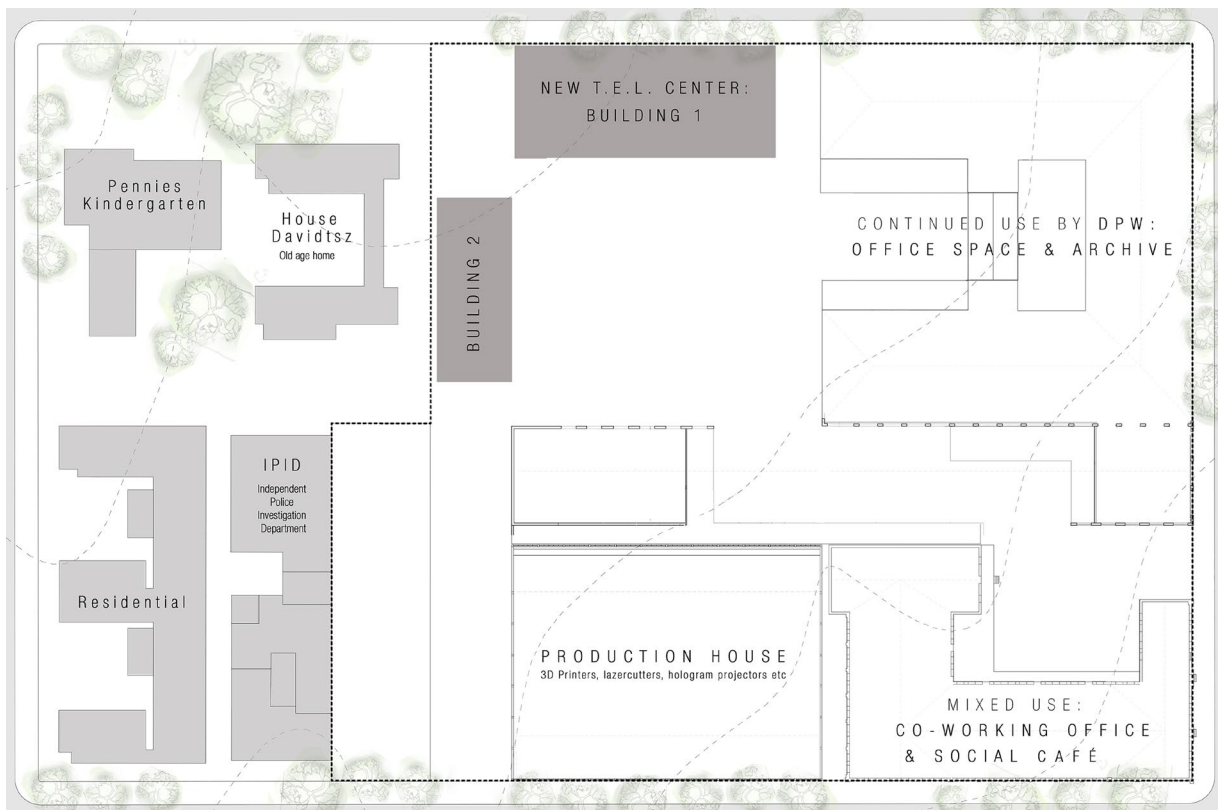


Figure 7.10: Programmatic masterplan (Author, 2016)

Figure 7.10 illustrates the programmatic masterplan for the block in its entirety as informed by the contextual and theoretical analysis. Figures 7.11 - 7.13 indicates the spatial relationships and scale of the new proposed T.E.L. Centre in relation to the existing buildings on the block. Figure 7.11 indicates the northern elevation which shows the relationship of the administration building and Huis Davidtz (the old age home) to the new T.E.L. Centre. Figure 7.13 is a north-south section through the saw-tooth building and new T.E.L. Centre, and Figure 7.12 shows a west-east section through Huis Davidtz, the western footprint of the T.E.L. Centre and the administration building.

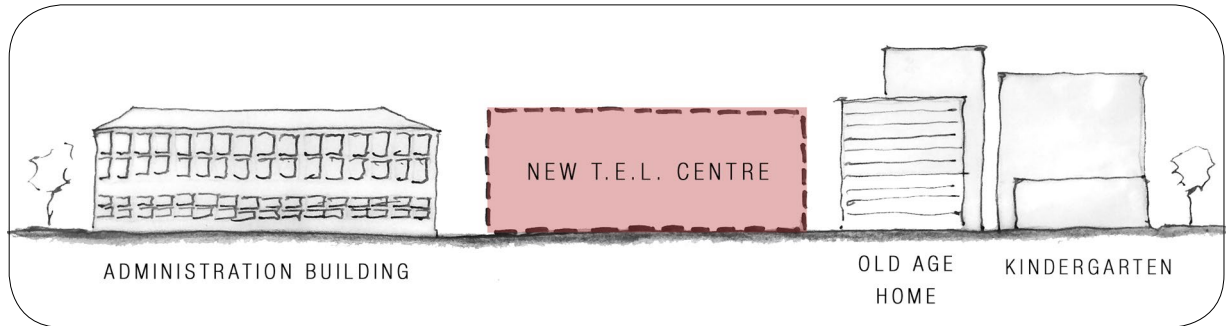


Figure 7.11: Northern elevation - contextual relationships

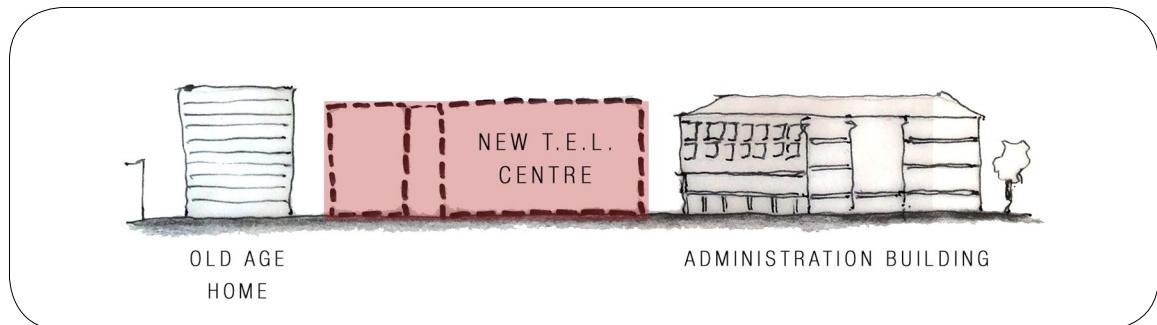


Figure 7.12: West - east section - contextual relationships

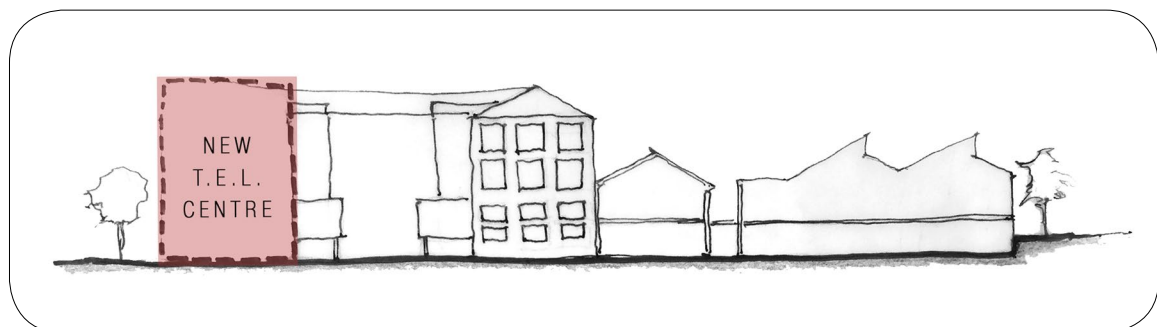


Figure 7.13: North - south section - contextual relationships

Figure 7.14 illustrates the proposed spatial relationships for the new building footprints; the main building has the north-south orientation and street front and the secondary building the east-western orientation. Both buildings 'open up' to the main square which also links with the surrounding open spaces in the block to form a negative spatial network. The main entrance is in the 'urban foyer' on the north-western corner in relation to the main movement pattern from that direction.



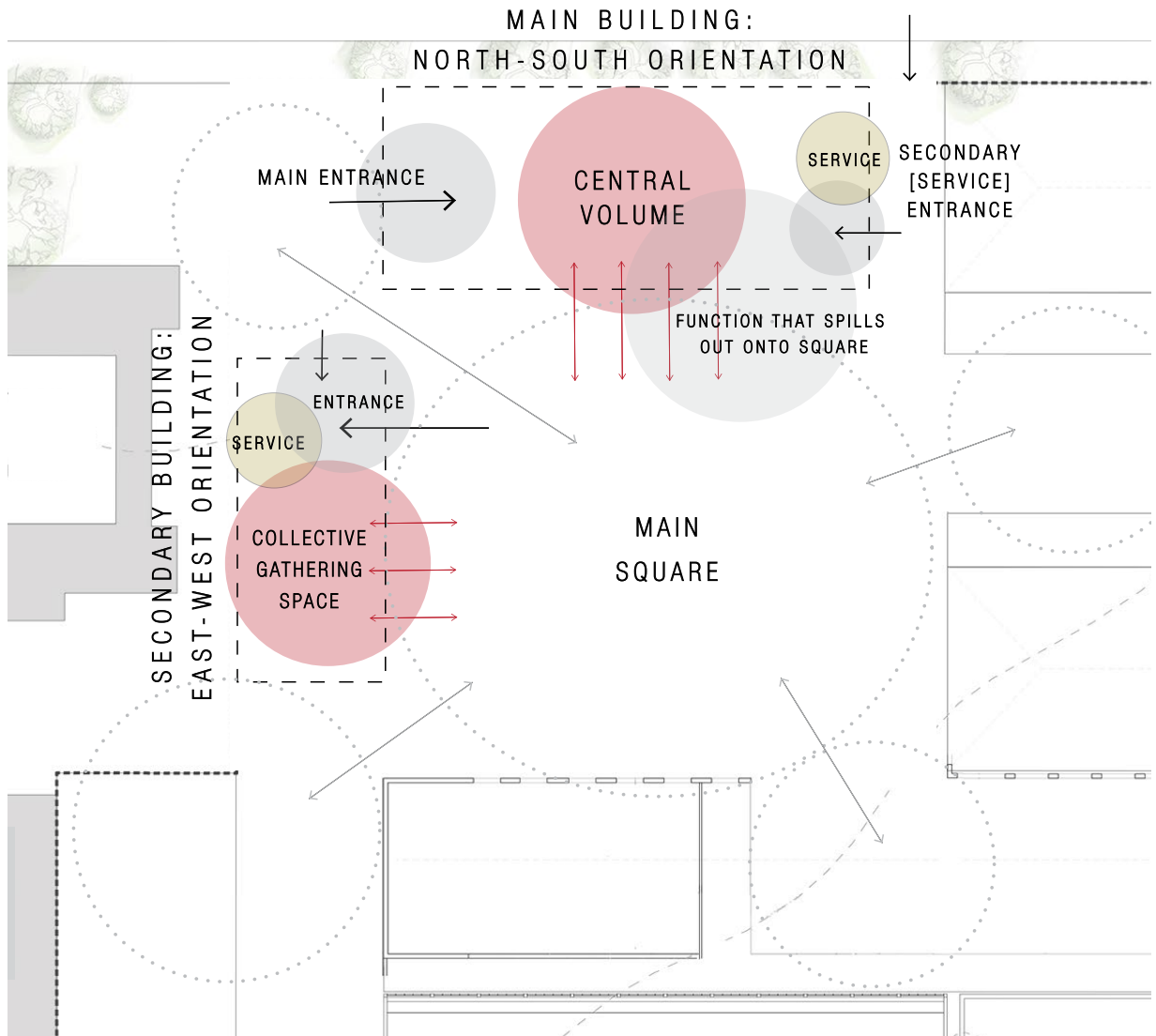


Figure 7.14: Site plan - contextual relationships



## 7 . 8 T R A N S L A T I N G T H E O R Y T O D E S I G N

In light of the discussion on the various ‘technology-induced compromisers’ and their respective ‘counter-strategies’, the following is a section which will translate these counter-strategies (to compromisers 1, 3, 4, 5 and 6, (2 is a programmatic response in the Wierda building, as explained in section 7.6)) into spatial design scenarios and consider relevant precedent studies related to each. The sequence of dealing with each ‘compromiser-translation’ does not follow that of the theory chapter, but rather the approach taken to the design process as a whole; still, each ‘compromiser’ is numbered correspondingly to the theory chapter for clear reference between the two.

SEQUENCE OF COMPROMISER-TRANSLATIONS:

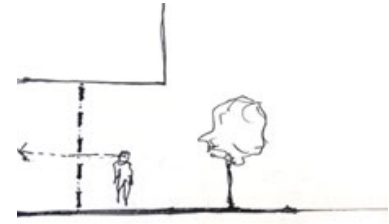
- COUNTER-STRATEGY to Compromiser 1 [Loss of slow pace of reality]
- COUNTER-STRATEGY to Compromiser 5 [Loss of quality of intimate face-to-face communication]
- COUNTER-STRATEGY to Compromiser 3: Loss of relationship with nature
- COUNTER-STRATEGY to Compromiser 4: Loss of culture & Identity
- COUNTER-STRATEGY to compromiser 6: Mass allure of [negative] escapism

COUNTER-STRATEGY to Compromiser 1 [Loss of slow pace of reality]

A.) Thickening of the spatial experience:

- Providing enticing attractions & as much diversity as possible along the meandering route.

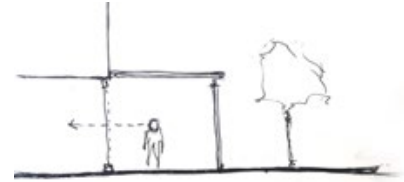
- Soft ground floor edges  
(Open, active edges with varying degrees of permeability)



B.) Crafting a relaxed environment

(When people are at ease they would not feel the need to pass by quickly, they will linger):

- Human-centred and -scaled spaces
- Integrating nature much more into urban life (see 'compromiser 3')



EXISTING :

————— EXISTING HARD EDGE  
Existing building



PROPOSED :

————— HARD EDGE  
New building wall

----- SOFT EDGE  
Semi-permeable, openings, layering, thresholds, unveiling

||||| INTERACTIVE EDGE  
Dialogue between inside and outside

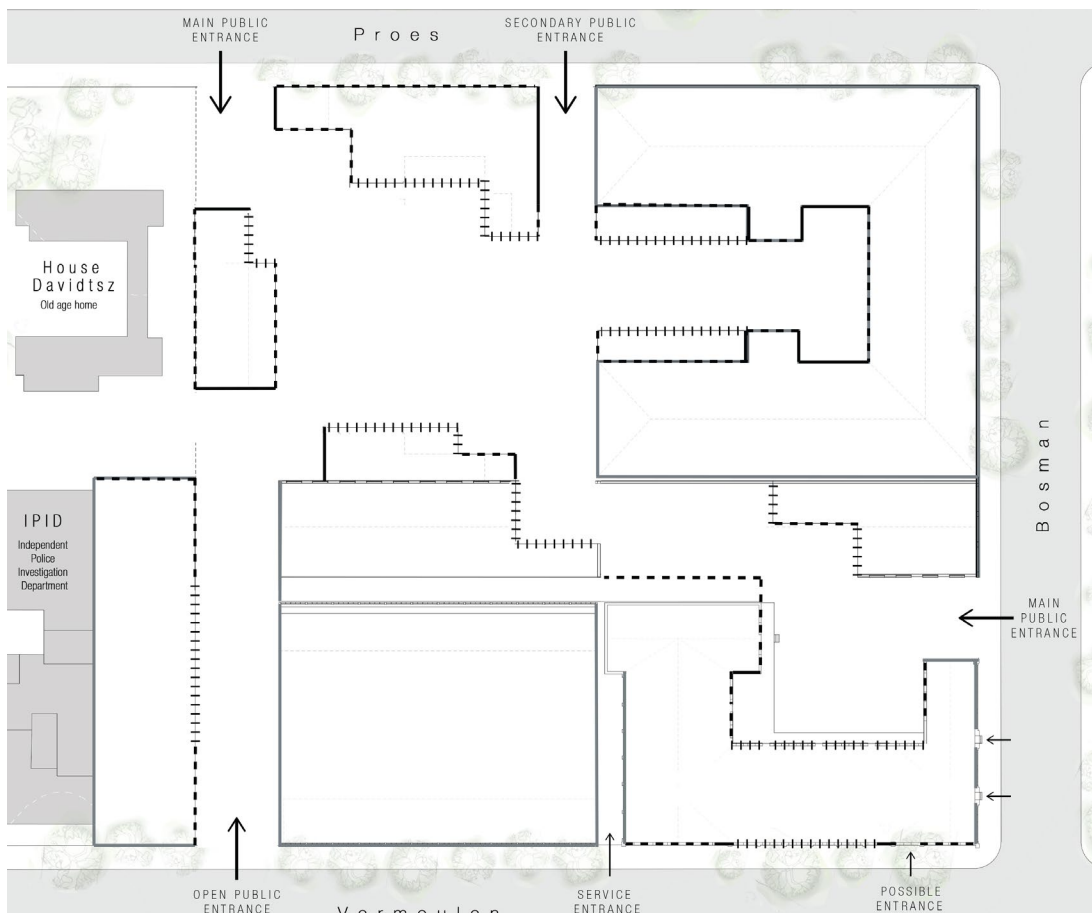
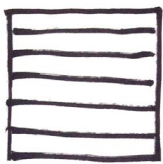
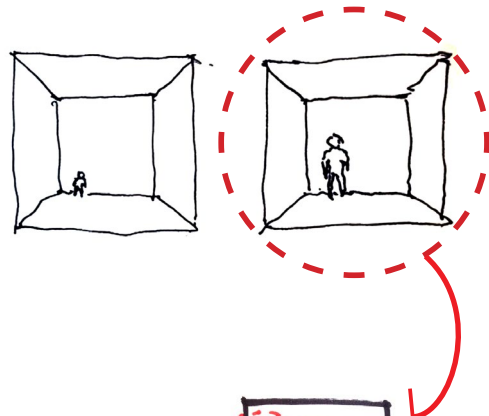


Figure 7.15: Existing & proposed edge conditions

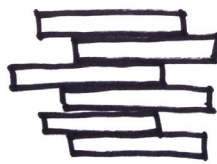
COUNTER-STRATEGY to Compromiser 5 [Loss of quality of intimate face-to-face communication]

HYPOTHESIS: ARCHITECTURE AS A 'HUMANIST NEGOTIATOR'

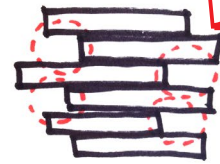
- Through **collective, social, humanist-scaled space-making** rather than universal, monumental, objective space-making



Standard building



Levels shifted



Small pockets of indoor-outdoor spaces

- By celebrating and enhancing (extending, thickening the experience of) the spaces in a building where social interaction would typically occur (i.e. circulation routes, foyers, landings, gathering spaces, all the 'grey' / un-programmed spaces)
- By **maximising informally programmed space**

- As much as possible **dialogue and connection** throughout all spaces and volumes.
- **Multi-functionality** - da Costa & van Rensburg states that "human behaviour and social practices are inherently spatial, and that the organisation of space is a social product." (2008:47) When a space is adaptable to a whole range of social functions, in-place social interaction is promoted and maximised.

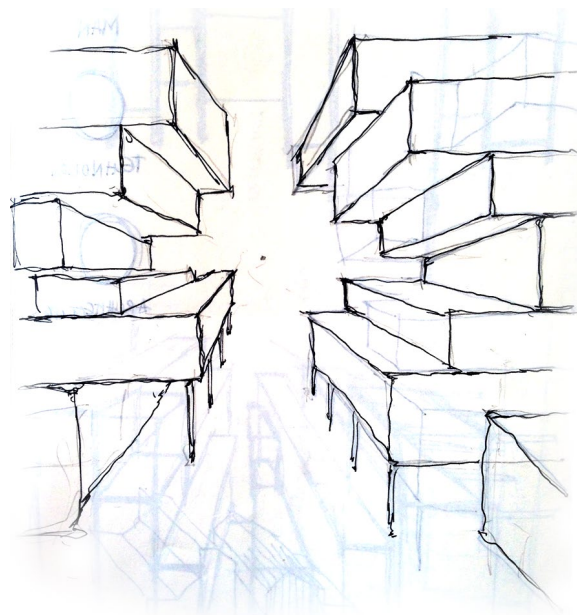
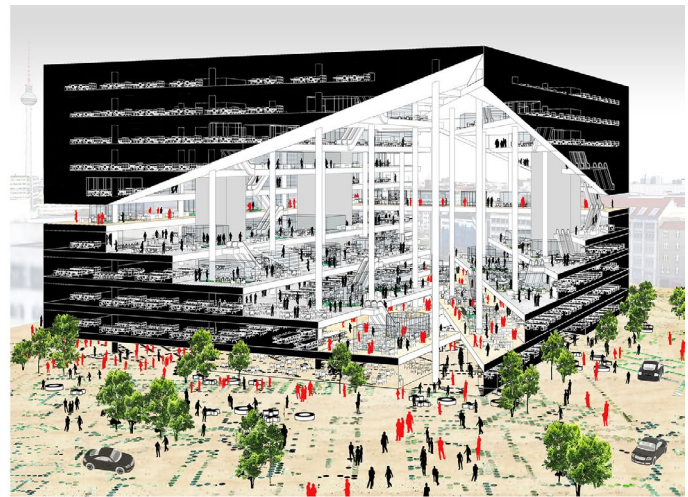




Figure 7.16 illustrates a proposal by OMA for 'Digital Valley' - a media campus in Berlin. The architects derived the design in response to the crucial consequence of technological advancement: "the relationship between the worker and his computer, which isolates him in a bubble of introverted performance, inaccessible to collective overview" (Quirck, 2013).



According to the architects, "In the digital office, staring intently at a screen dampens all other forms of attention and therefore undermines the collective intelligence necessary for true innovation" (Quirck, 2013).



The concept for their building constitutes a terraced structure that opens up to a central open volume, and is mirrored to the top to form a three-dimensional canopy.



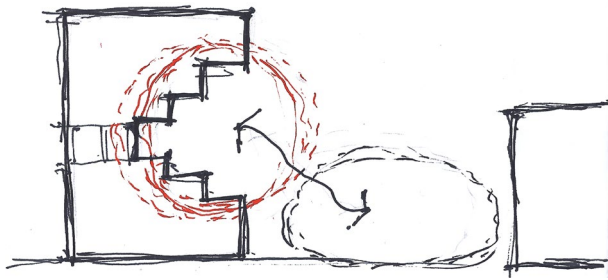
Figure 7.16: Proposal for 'Digital Valley' by OMA

Figure 7.17 is another proposal for the same project: Ole Scheeren's Creative Cloud, which presents the same type of interactive spaces around a central open volume.



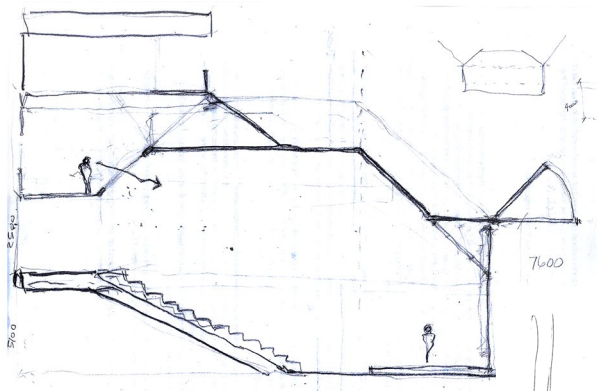
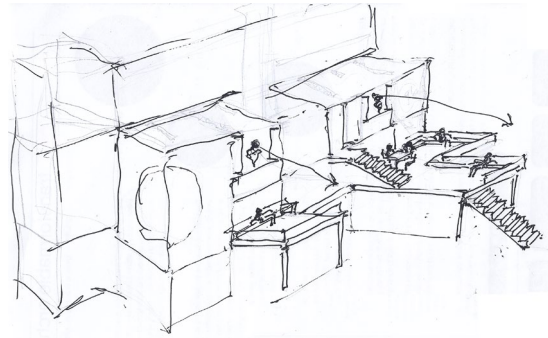
Figure 7.17: Proposal for 'Digital Valley' by Ole Shereen

From these case studies it is clear that this is an important design generator in order to maximise interactivity, dialogue and collective space-making.



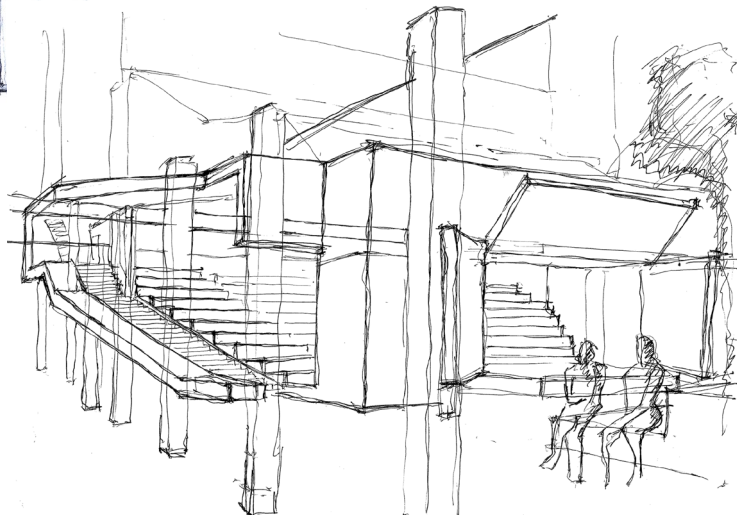
**Figure 7.18:** Sectional diagram:  
 Interaction between void formed by building  
 and main open square (Author, 2016)

Figure 7.18 illustrates a sectional diagram, related to the idea of spatial interactivity, but which also liaises directly with the central open square in the north-western quadrant of the block. One of the advantages inherent in a CBD context is the density and possibility of vertical development, with which comes the potential for views.



**Visual interaction between  
 auditorium and levels above**

**Visual interaction between  
 auditorium and outside**



Evolution of northern facade:

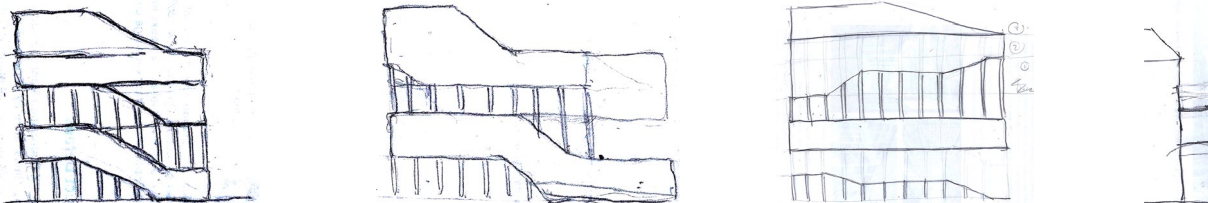






Figure 7.19: Museum of Image and Sound by Diller Scofidio + Renfro

As previously mentioned, the movement and circulation routes through a building are where spontaneous social interaction typically occur and this should therefore be enhanced.

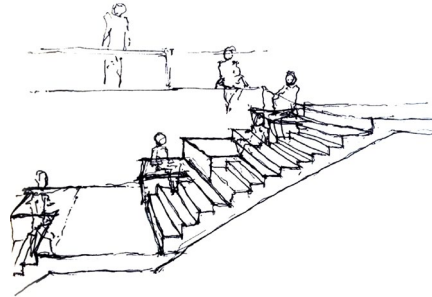


Figure 7.20: Columbia medical center by Diller Scofidio + Renfro

Figure 7.19 - 7.21 illustrates a few projects by Diller, Scofidio and Renfro in which the vertical movement is celebrated and expressed in the facade. The conventional method for vertical movement is typically a central staircase which repeats itself around an open volume; while this functions well, it causes a divide between the actual 'working spaces' from this open-ended interactive volume.

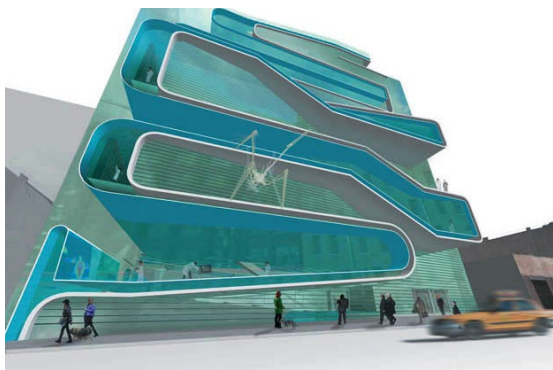
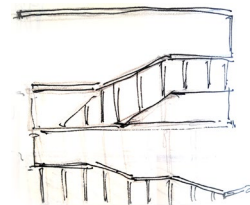
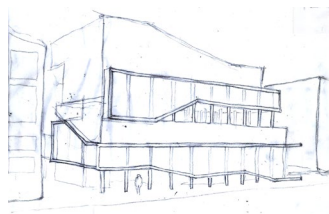
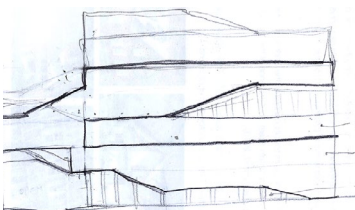


Figure 7.21: Eyebeam Museum by Diller Scofidio + Renfro

This paper therefore argues for various interpretations of the vertical movement, spread out in different ways (swept up from street level, rising up around open volume, interchanging from interior to exterior to encourage connection with the outside and blurring the boundaries between indoors and outdoors) but to still form a continuous route through the building (and not disjointed, separated stairs).



COUNTER-STRATEGY to Compromiser 3: Loss of relationship with nature

A.) Integrating nature into built fabric:

- Blurring the inside - outside relationship
- **Continuous urban surface** - from walkway to wall to roof
- **Vegetation throughout building** - horizontal, vertical and slanted planes (inside and out)

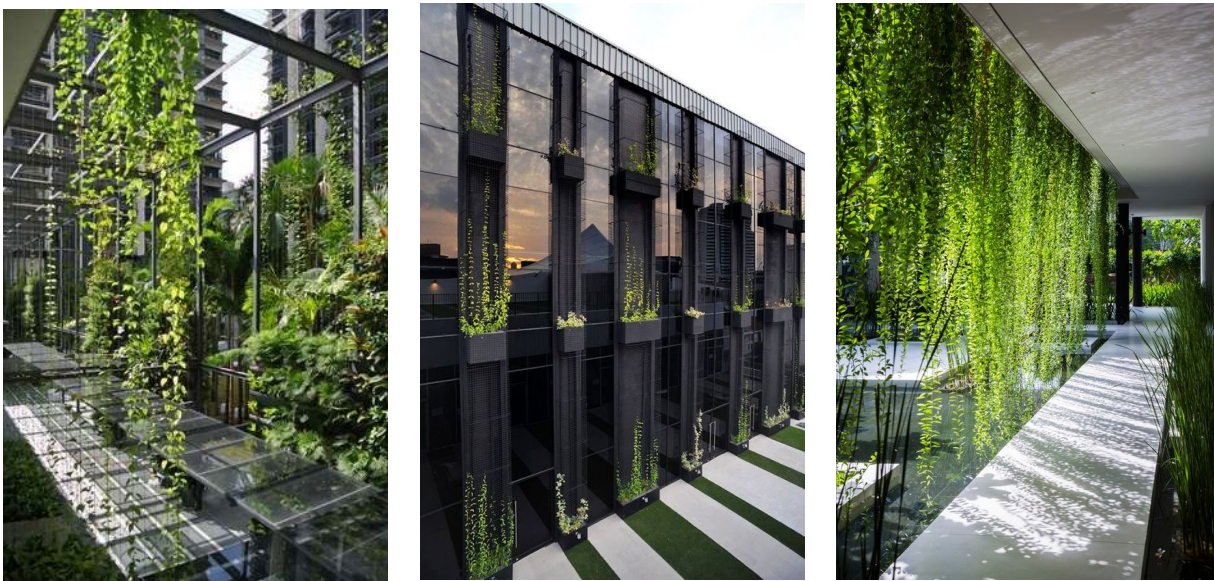
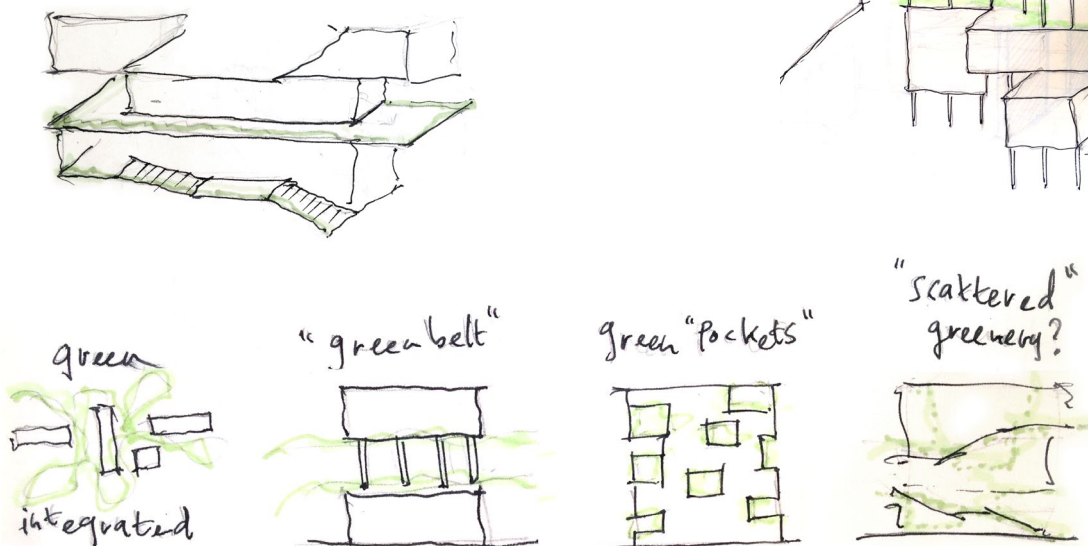
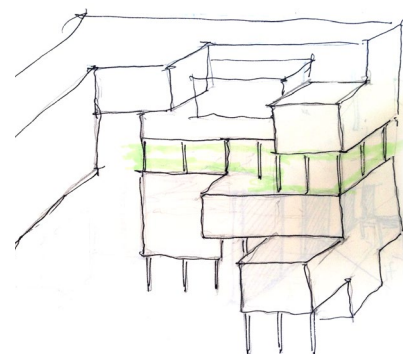
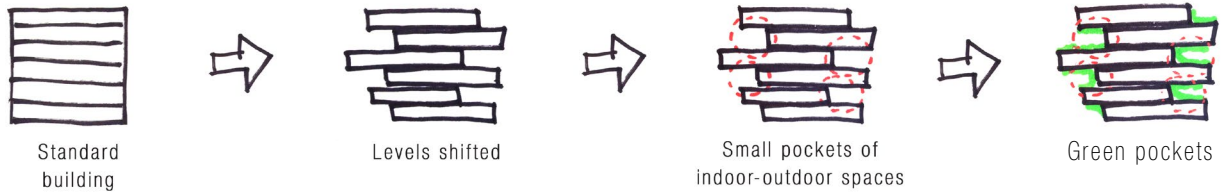


Figure 7.22: Examples of integrating nature into buildings

In response to compromiser 3, the incorporation of natural vegetation and exposed water elements (with which the user can come into close contact) is another main design generator.







- Bring user in contact with natural properties of water by **integrating water elements** in the design

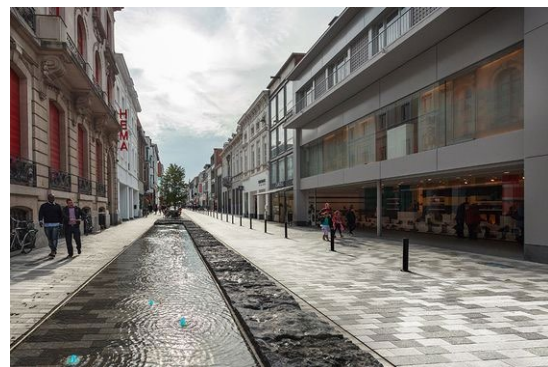
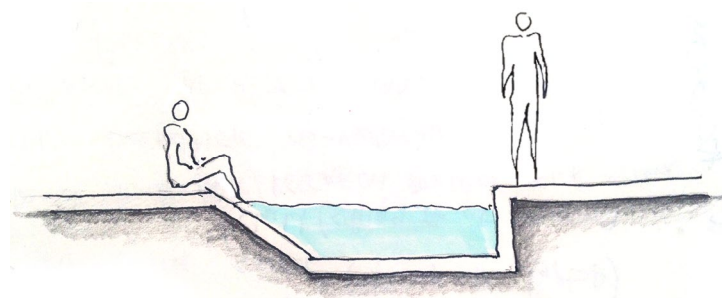


Figure 7.23: Examples of integrating water elements into public urban environments

Situated in an urban heat island, the water element can form part of an exposed water-harvesting system by means of an open water channel that makes use of the natural slope across the site to flow into the storage tank. Such a system presents the simultaneous benefits of public education about environmental issues as well as recreational intentions for the city-dweller.



Open water channel running down site's natural slope

## COUNTER-STRATEGY to Compromiser 4: Loss of culture & Identity

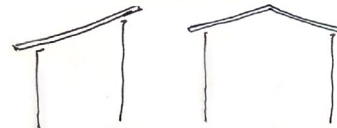
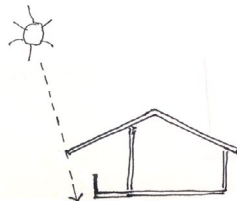
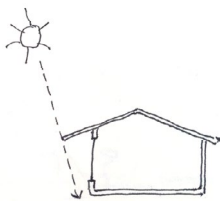
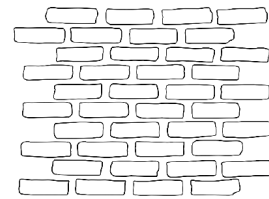
- MEDIATIVE APPROACH BETWEEN TRADITION AND MODERNITY (Barker, 2012 : 115):



In order to achieve this mediation, it is necessary to highlight the existing elements that characterise both the broader context of the city of Pretoria's architectural identity, as well as the GPW block's architectural identity.

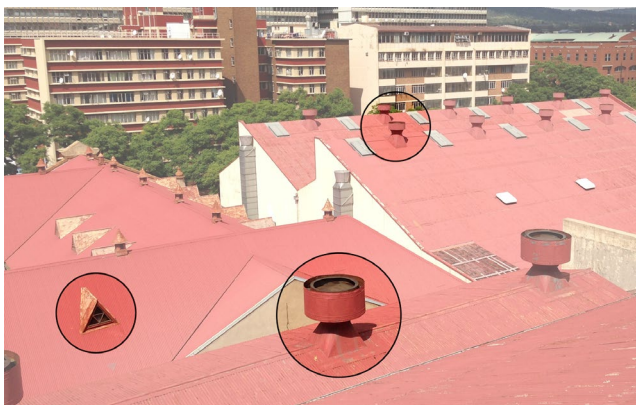
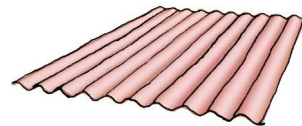
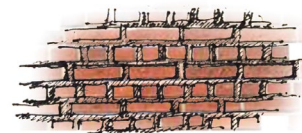
TRADITIONS IN CONTEXT OF PRETORIA (Fisher, le Roux and Mare, 1998):

- Traditional plan-forms
- Rustic brick, either directly as clinker or as whitewashed stock
- Low-pitched iron roofs
- Deep shaded eaves and verandas
- Sun-shy windows
- Sensitivity to landscape and land features
- An architecture responsive to climatic constraints



TRADITIONS IN CONTEXT OF GPW BLOCK:

- English bond-brickwork (see section 3.4.8)
- Red corrugated iron-roofing
- Variants of characteristic roof-ventilator



*"In South Africa, local conditions mandated the use of corrugated iron for roofing, allowing for the use of roof ventilators, which became part of a regionalist aesthetic."*

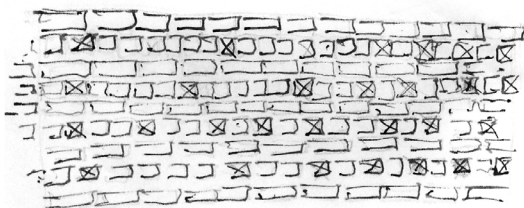
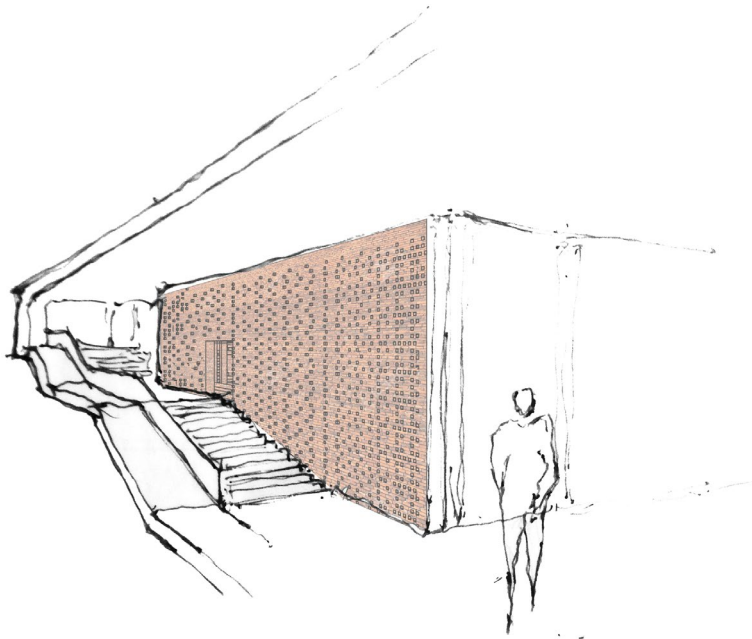
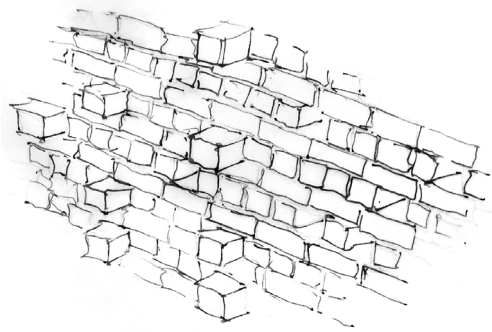
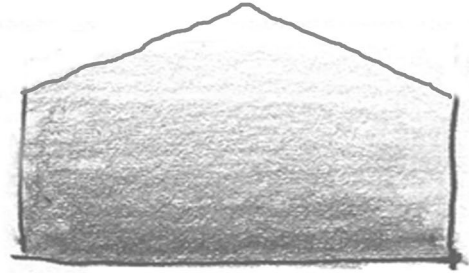
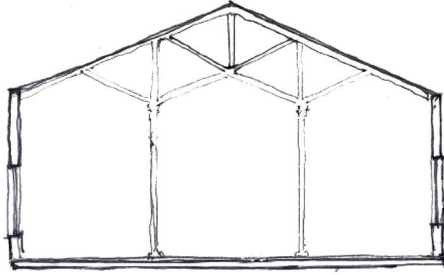
*(Carke and de Villiers, 1025: 79)*

*"The historical rooflines and ventilators contribute to the heritage value of the cityscape. The GPW's hybrid structure demonstrates the transition from traditional to modern construction methods."*

*(Clarke, Kuipers and Swart, 2015: 115)*

Figure 7.24: Roof ventilators on existing GPW buildings

- Mediating structure between stereotomic (solid, heavy, earth, brickwalls, concrete ) at the bottom and tectonic (light, air, steel, metal sheeting) at the top



sparse headers to abundant openings (in line with tectonic concept)



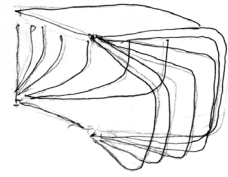


# 7.9 TRANSLATING PROGRAMME TO DESIGN [COUNTER-STRATEGY TO COMPROMISER 6]

MODULAR  
BUILT-IN  
T.E.L.  
PODS

individual

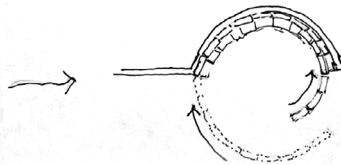
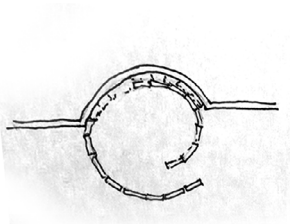
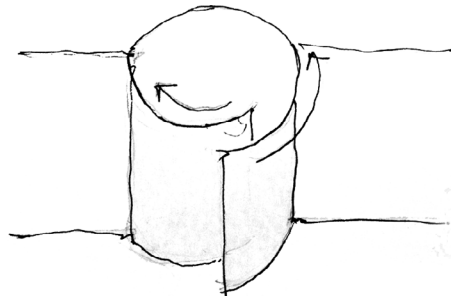
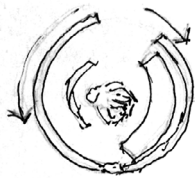
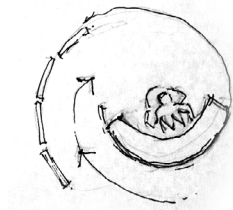
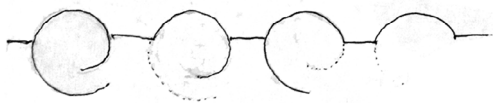
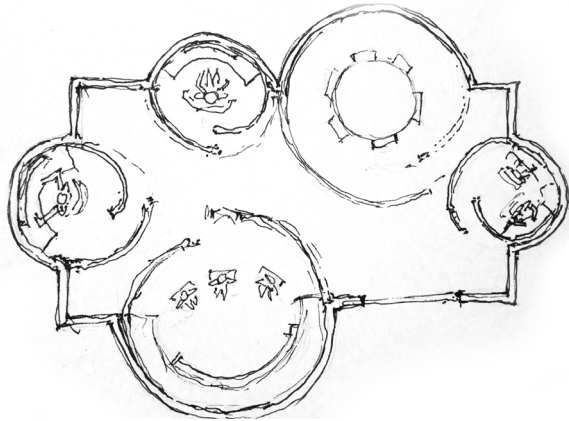
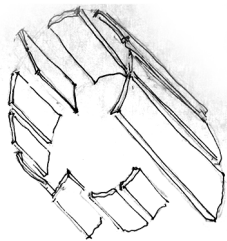
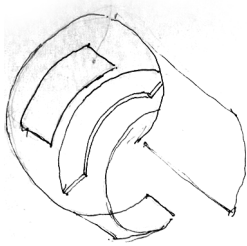
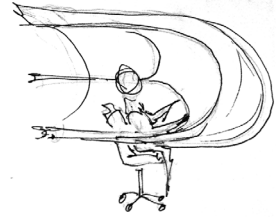
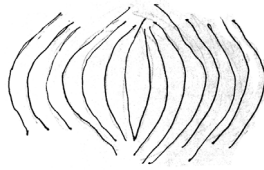
T.E.L.  
pods



collaborative

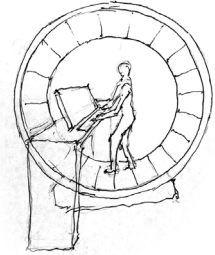
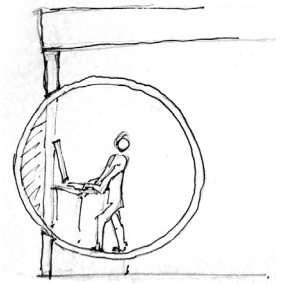
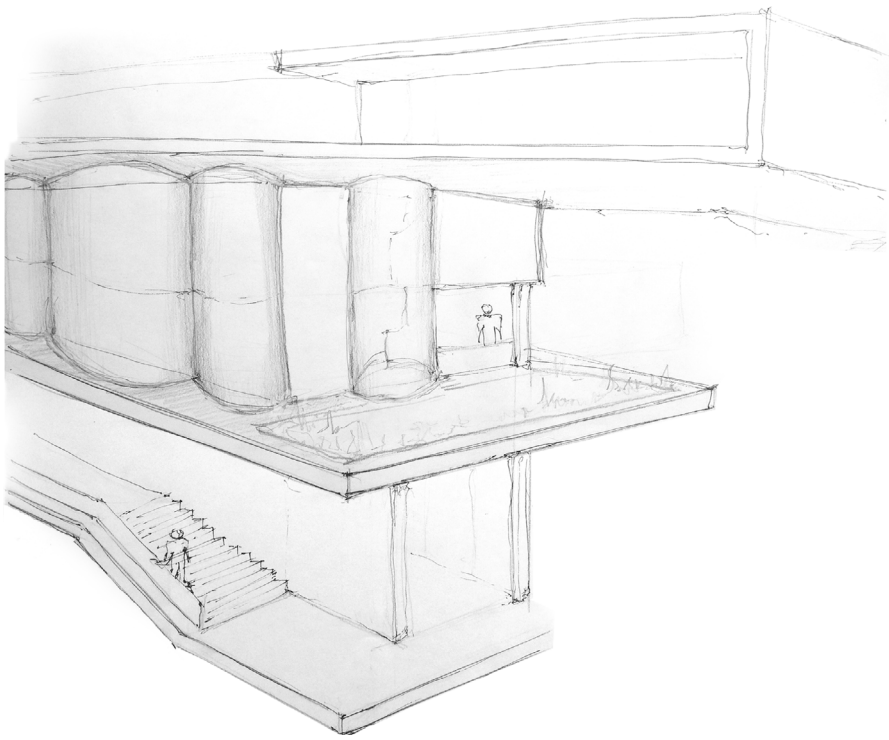
T.E.L.  
group  
pods

group  
meeting  
rooms

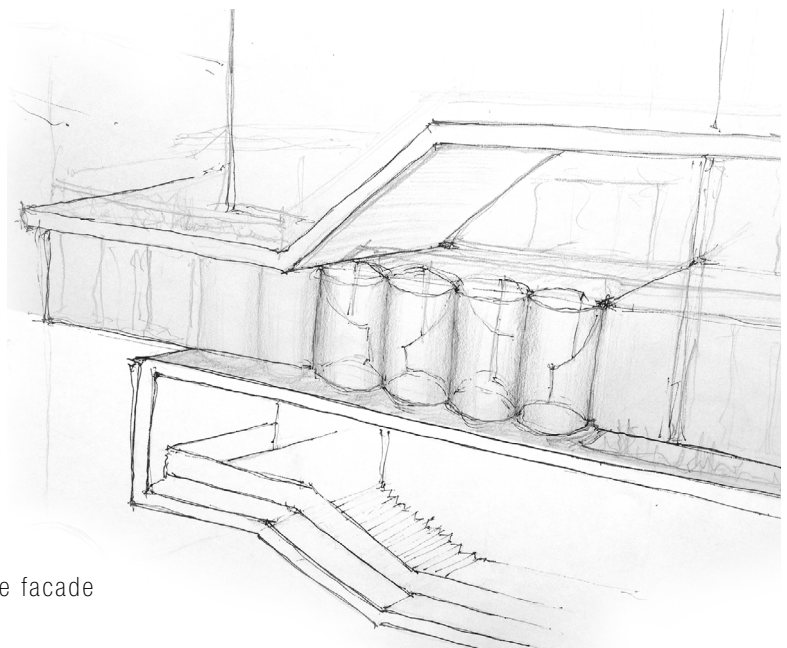
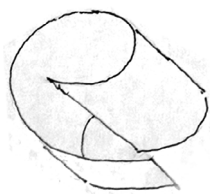
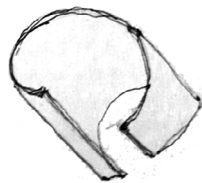
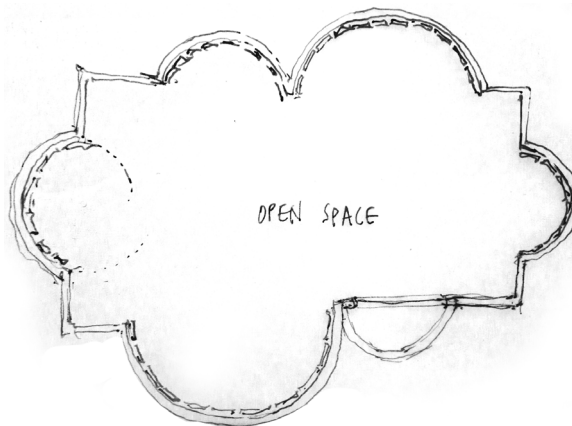


Alkibiades  
Cylindrical  
Sarcophagi  
A.H.





Adjustable pods to  
open up space

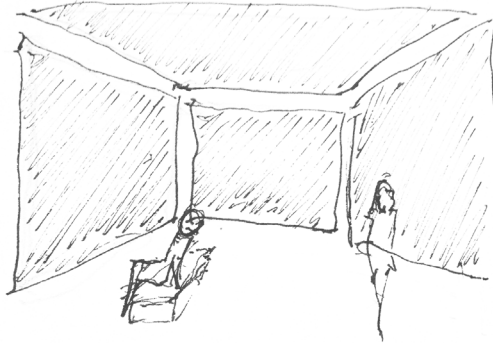


Expressing pods on the facade

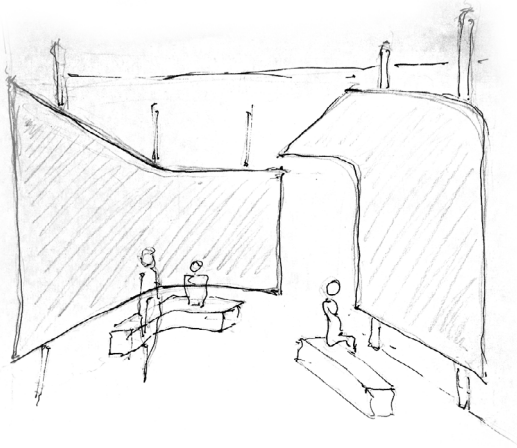


LEARNING  
COMMONS

"passive  
learning"



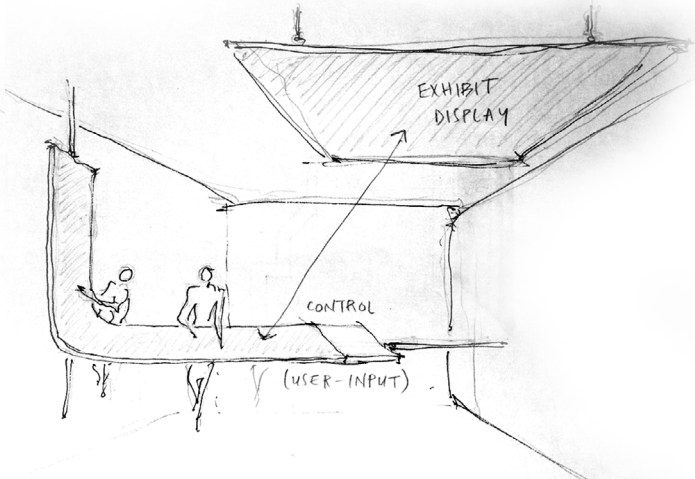
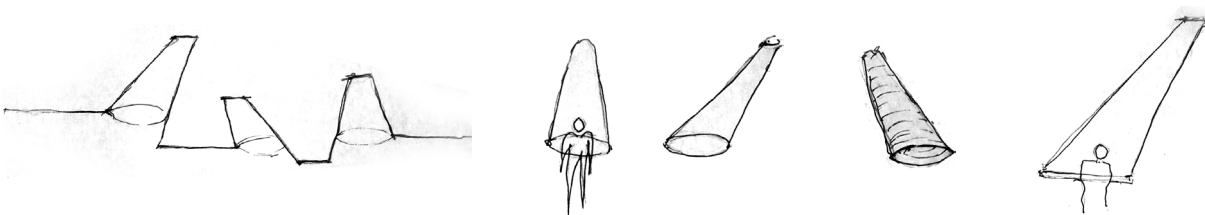
immersive  
[closed] T.E.L.  
'dark rooms'



LEARNING  
COMMONS

"interactive  
learning"

interactive  
[open] T.E.L.  
commons



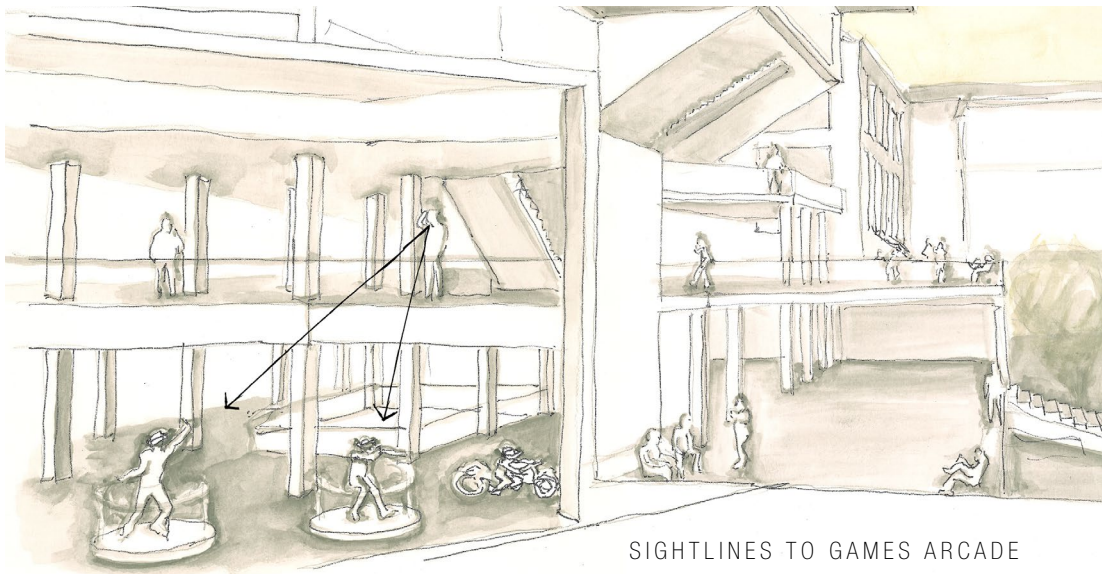
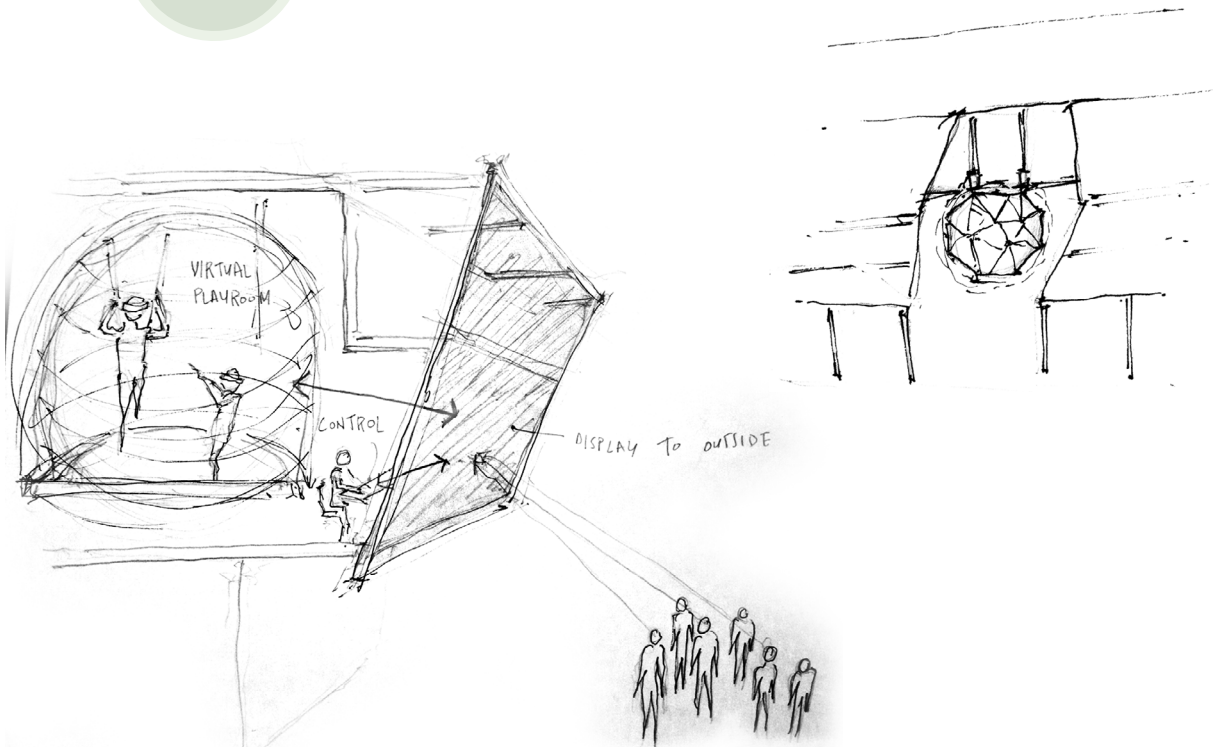
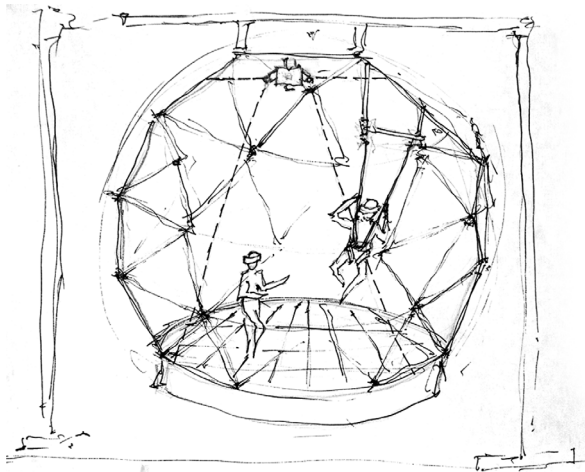
DIGITAL LEARNING SCREENS:





SOCIAL  
&  
PLAY

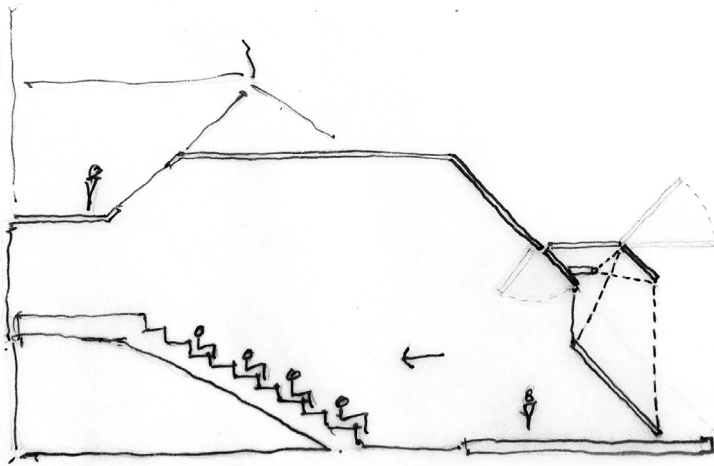
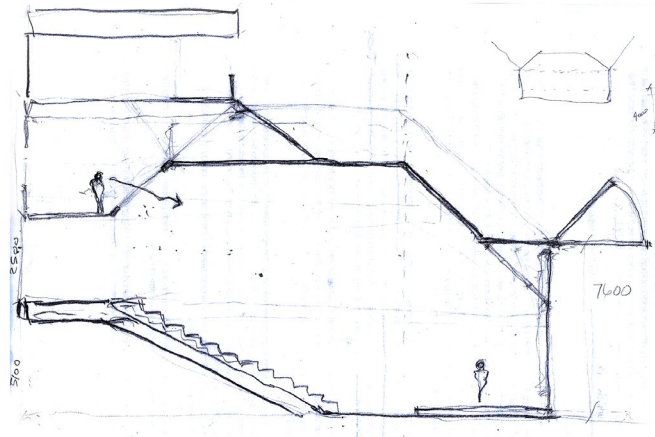
T.E.  
travelling  
and games  
arcade



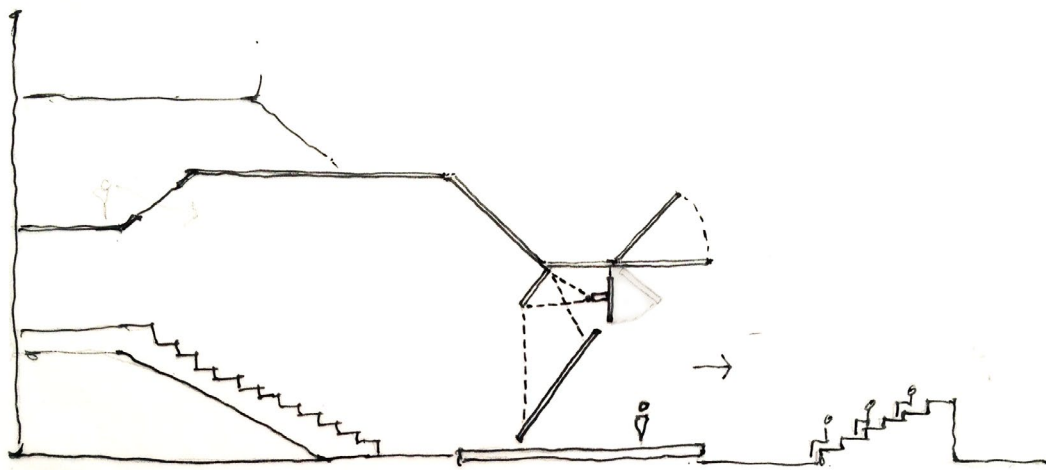


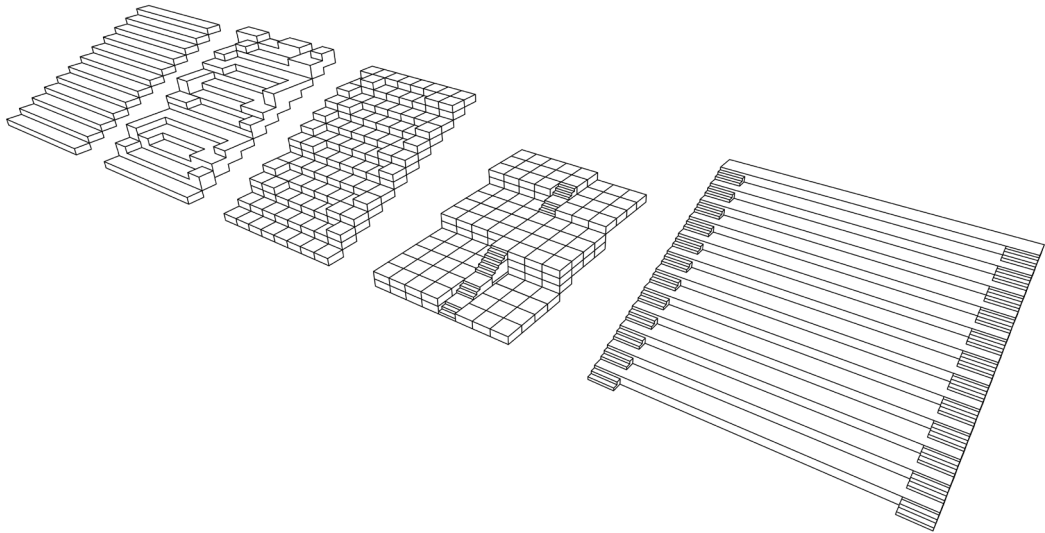
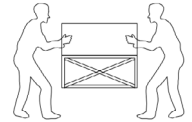
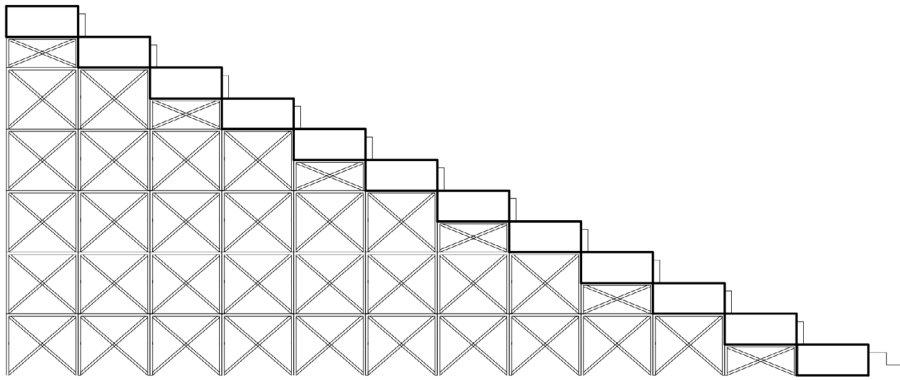
alterable  
'auditorium'

LEARNING  
COMMONS

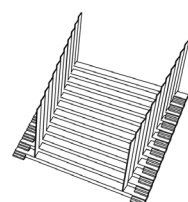
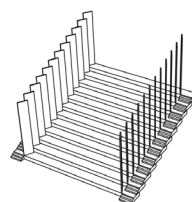
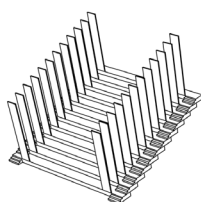
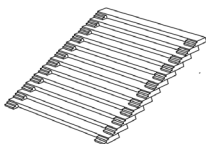
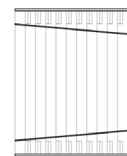
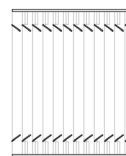
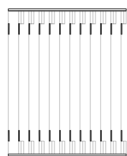


MULTI-DIRECTIONAL HOLOGRAM PROJECTION BACKSCREEN

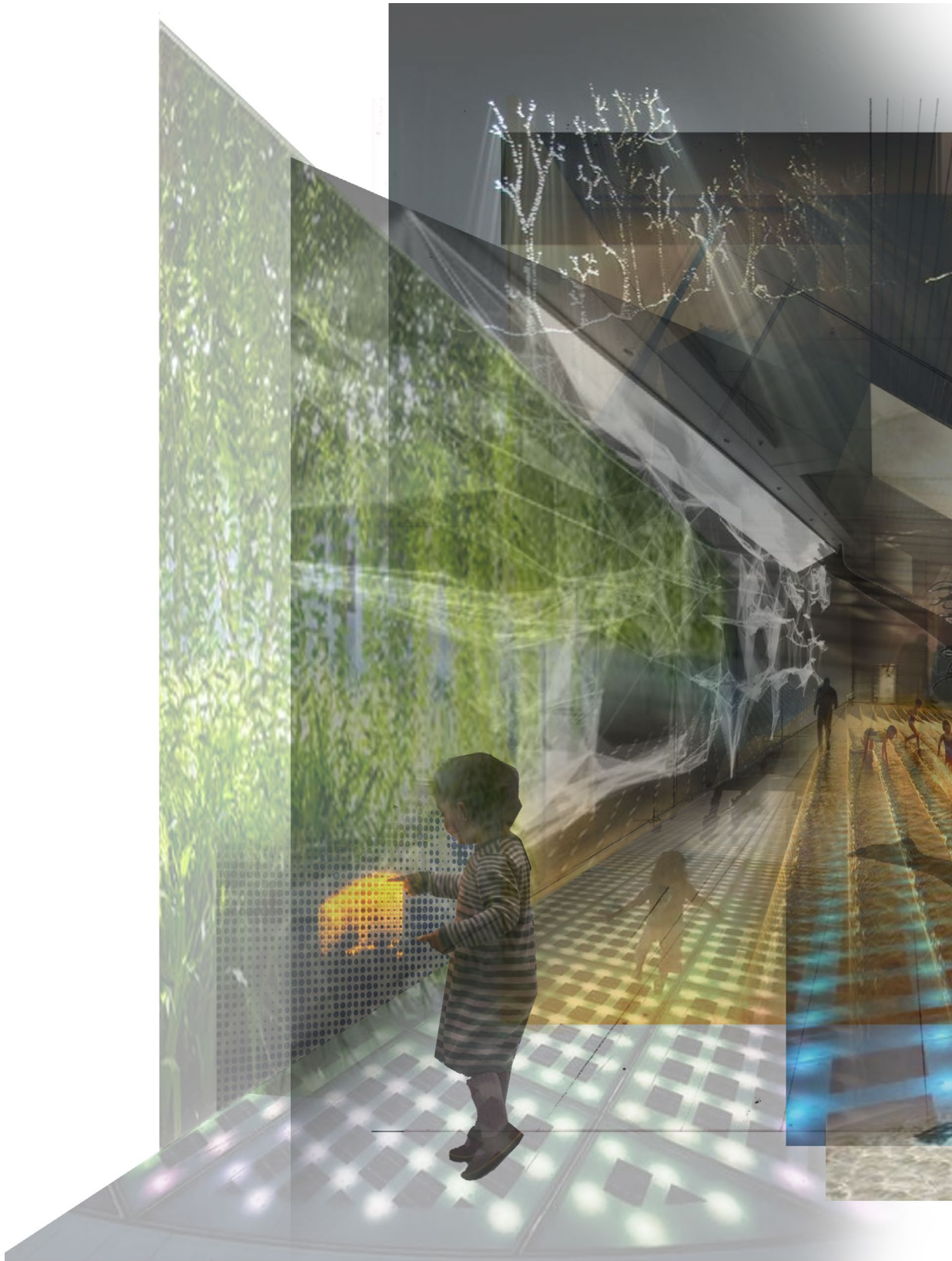




Modular structure for different seating configurations  
in adaptable 'auditorium'









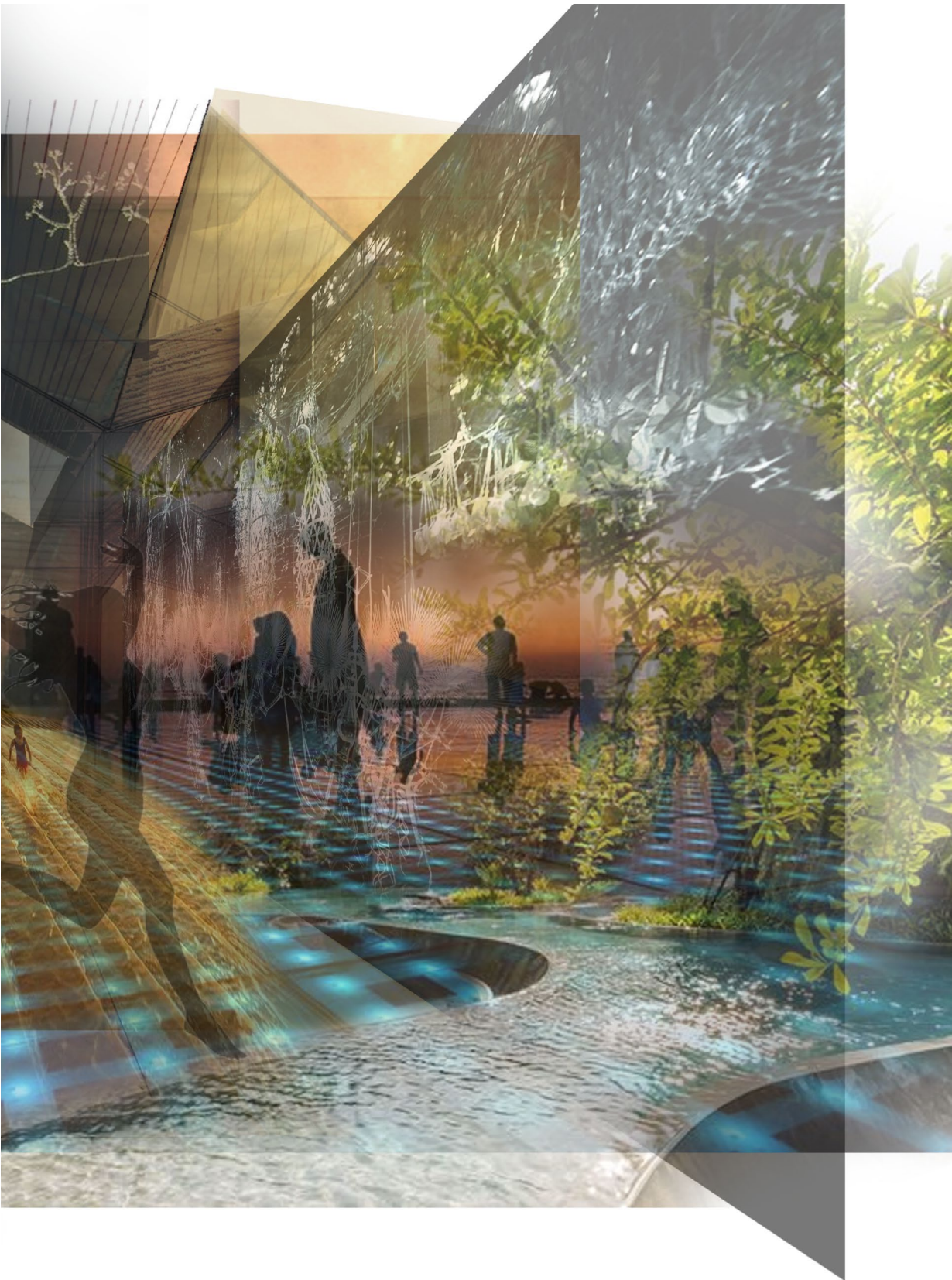
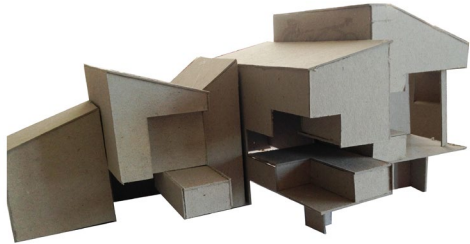


Figure 7.25: Conceptual vision (Author, 2016)





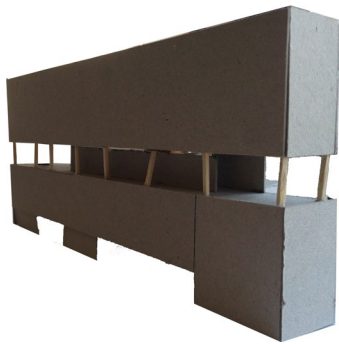
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7 . 1 0 . 1   E A R L Y   P R O C E S S   W O R K



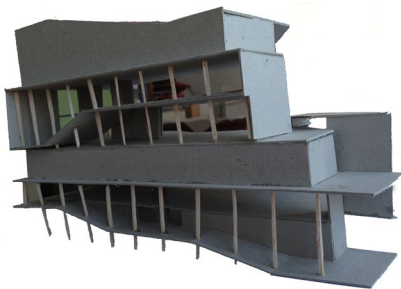
CONCEPT MODEL 1:  
Carving out 'interactive' void



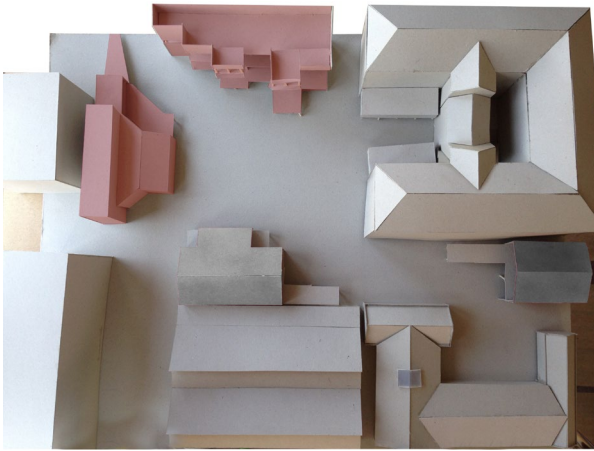
CONCEPT MODEL 2:  
'Interactive' southern facade



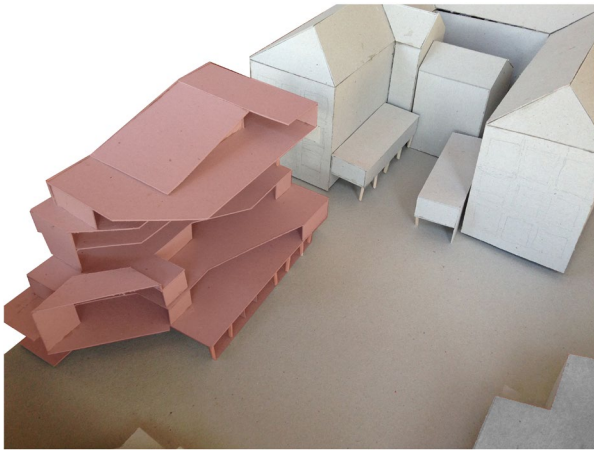
CONCEPT MODEL 2:  
Break through building -  
'Green belt'



CONCEPT MODEL 3:  
Expressing movement on  
northern facade



CONCEPT MODEL 2 in context:  
'Interactive' southern facade



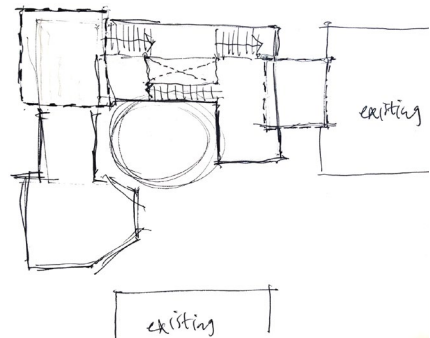
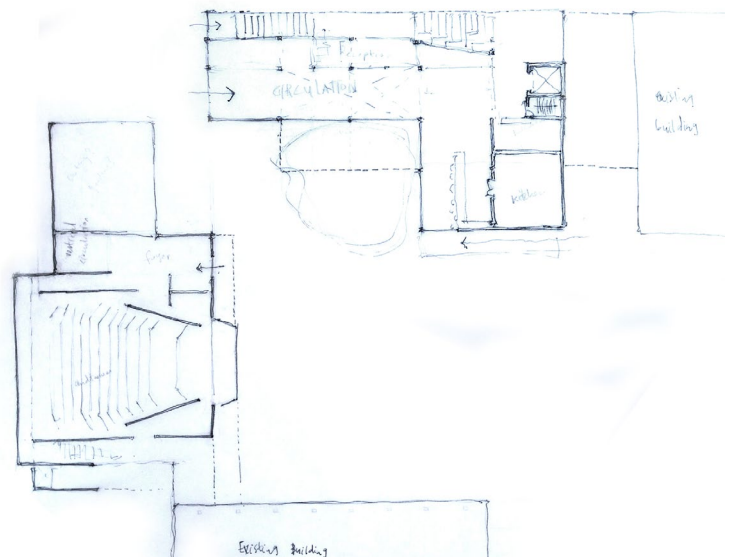
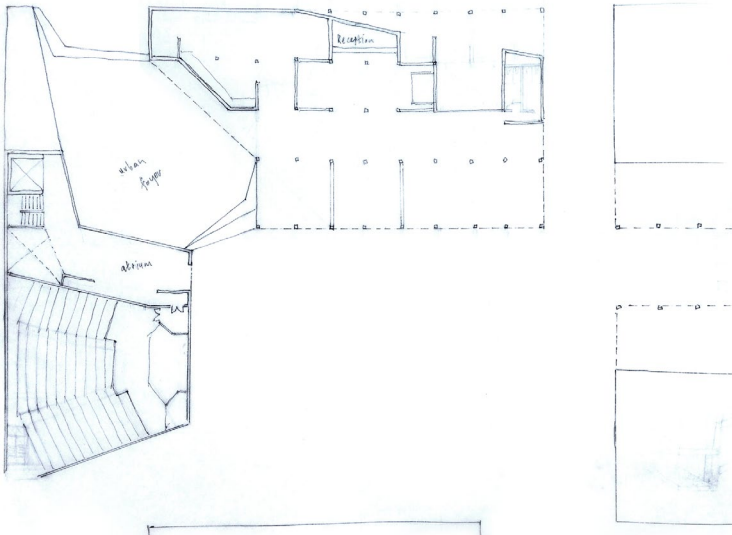
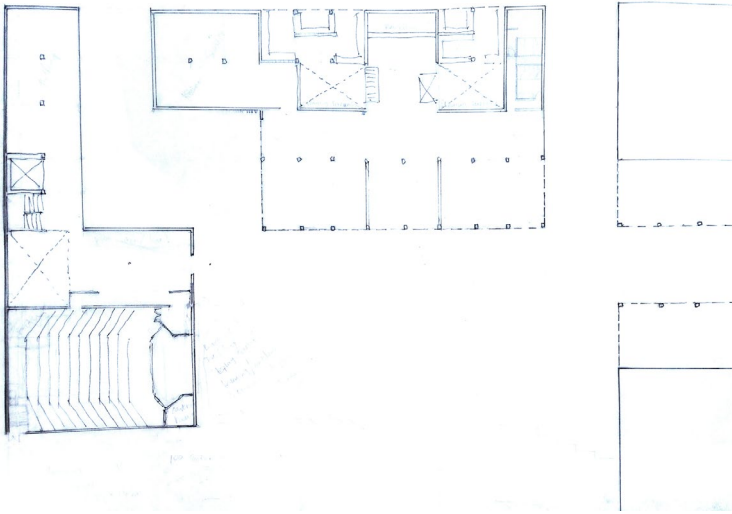
CONCEPT MODEL 3 in context:  
North building in relation to  
neighbouring administration building



CONCEPT MODEL 3 in context:  
North & west building

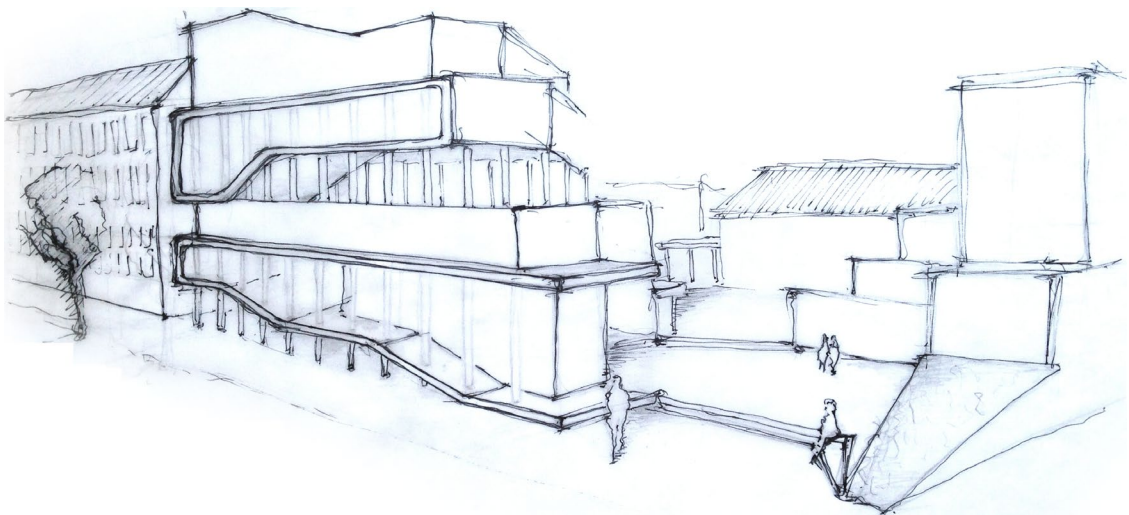
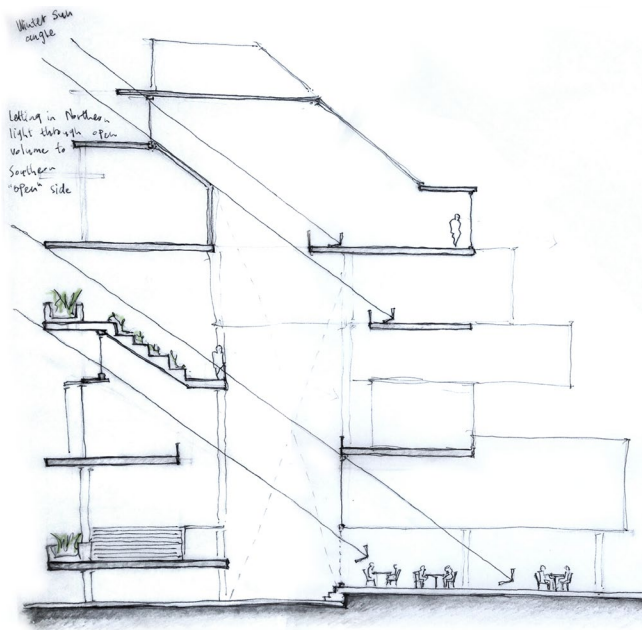
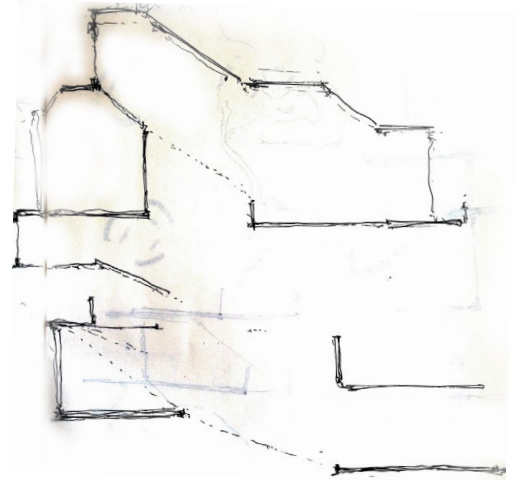
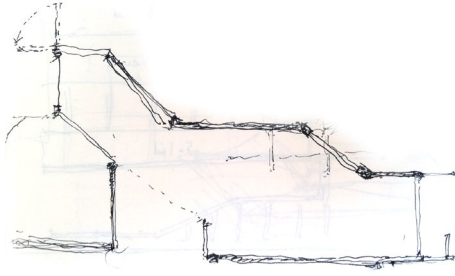


Evolution of plan:





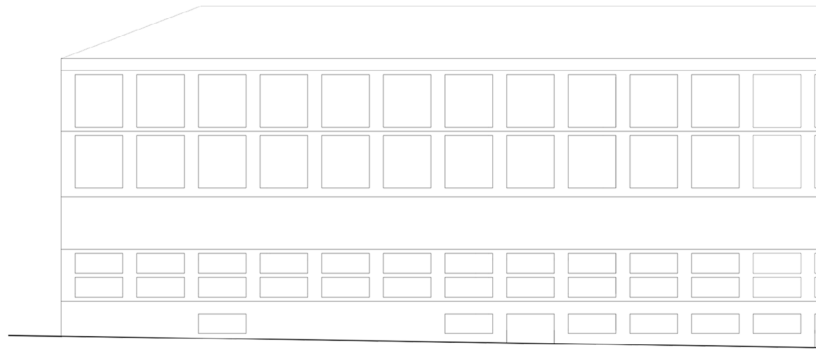
Sectional exploration:



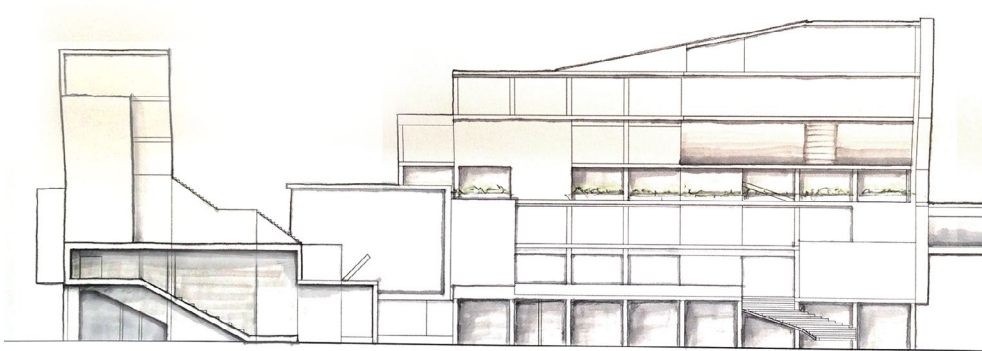




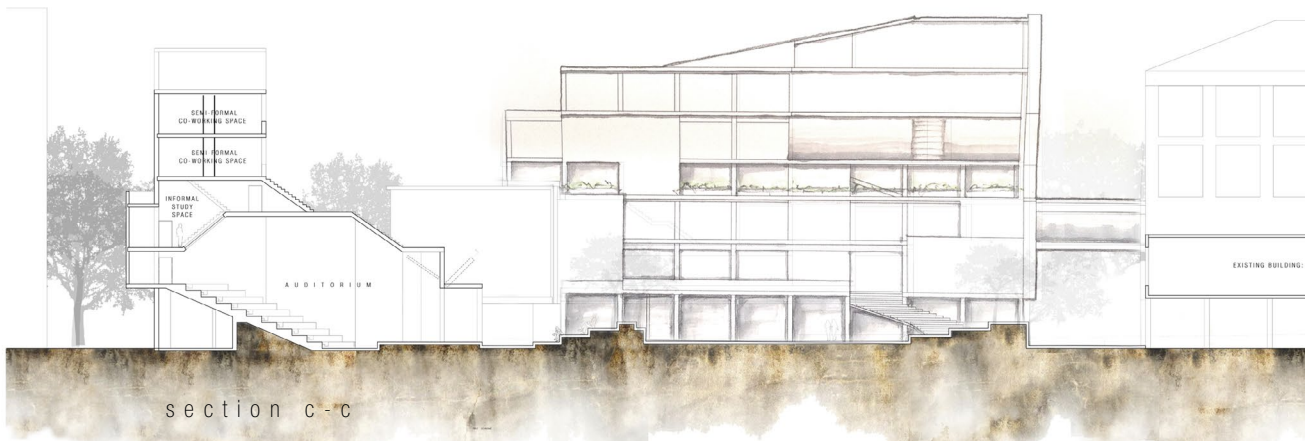
7.10.2 JUNE DESIGN  
CRIT DRAWINGS:



section a-a

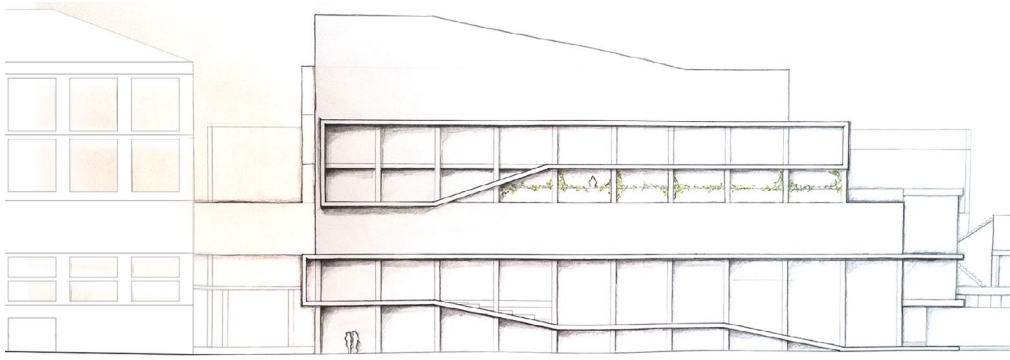


south elevation

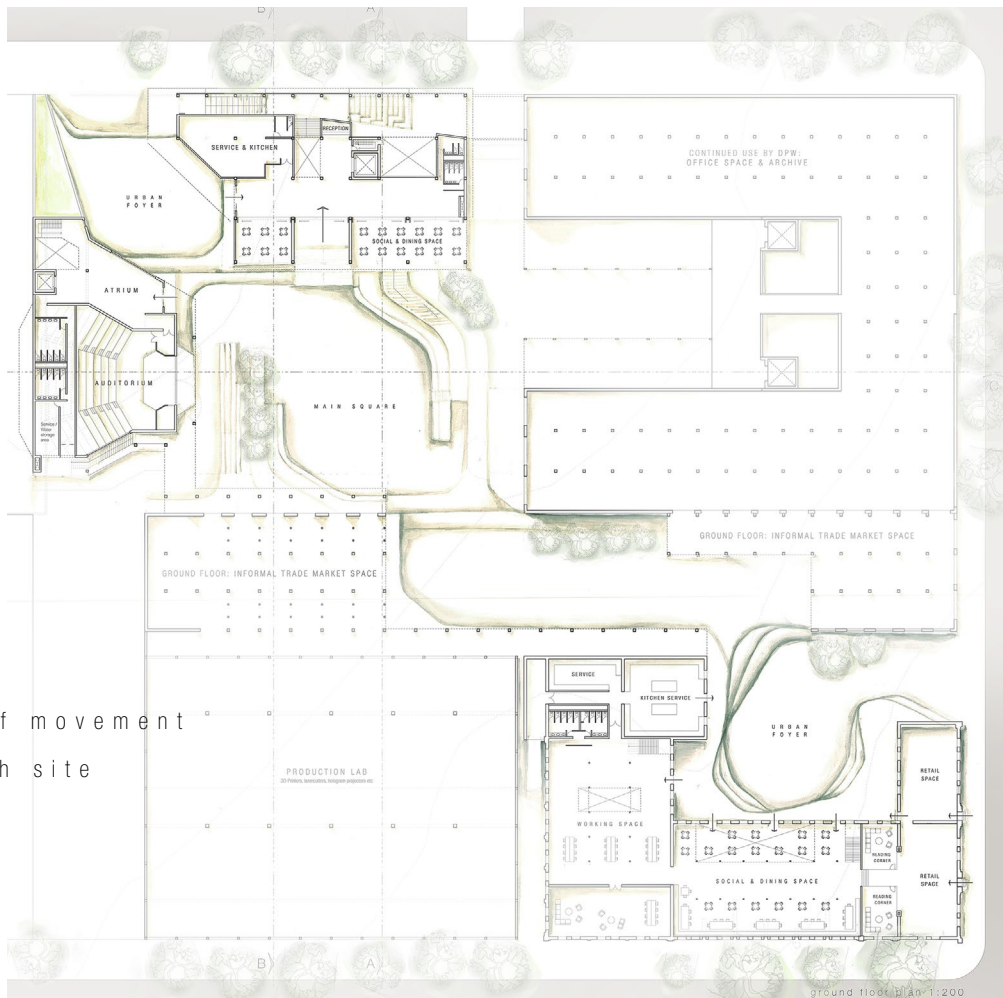
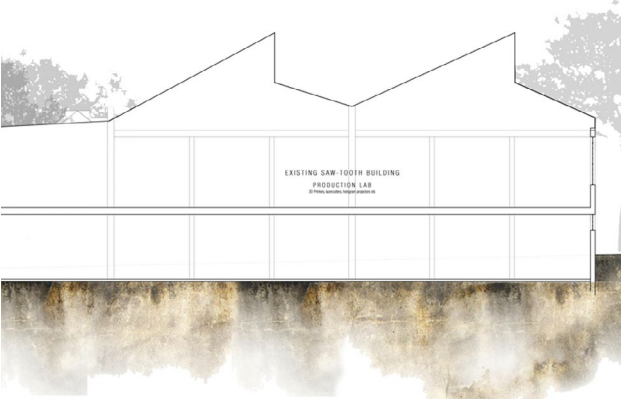


section c-c





north elevation

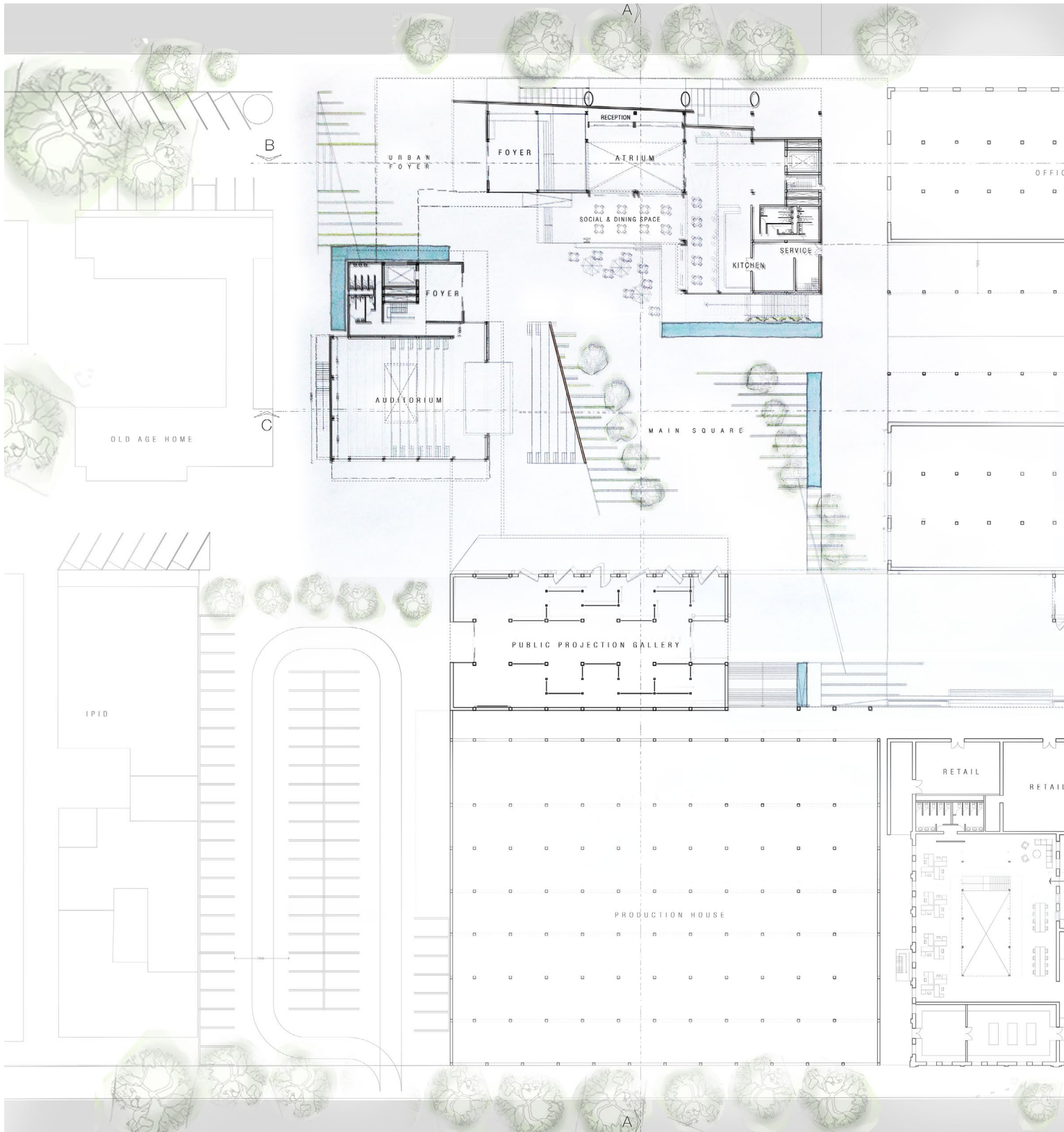


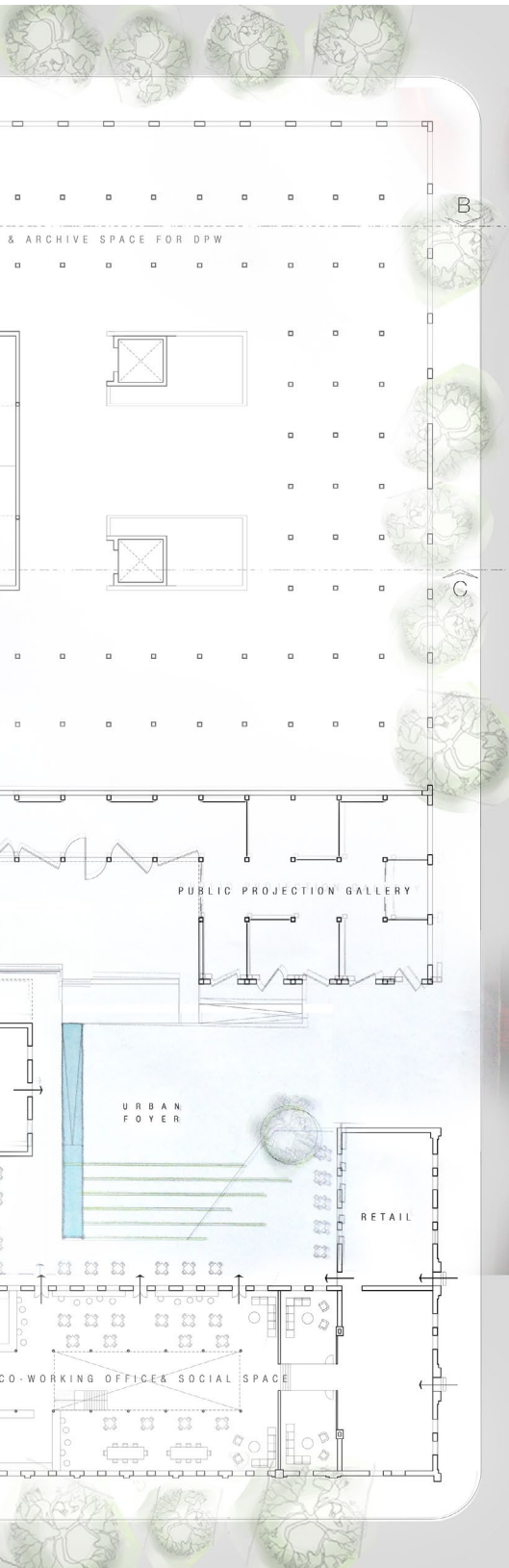
Flow of movement  
through site

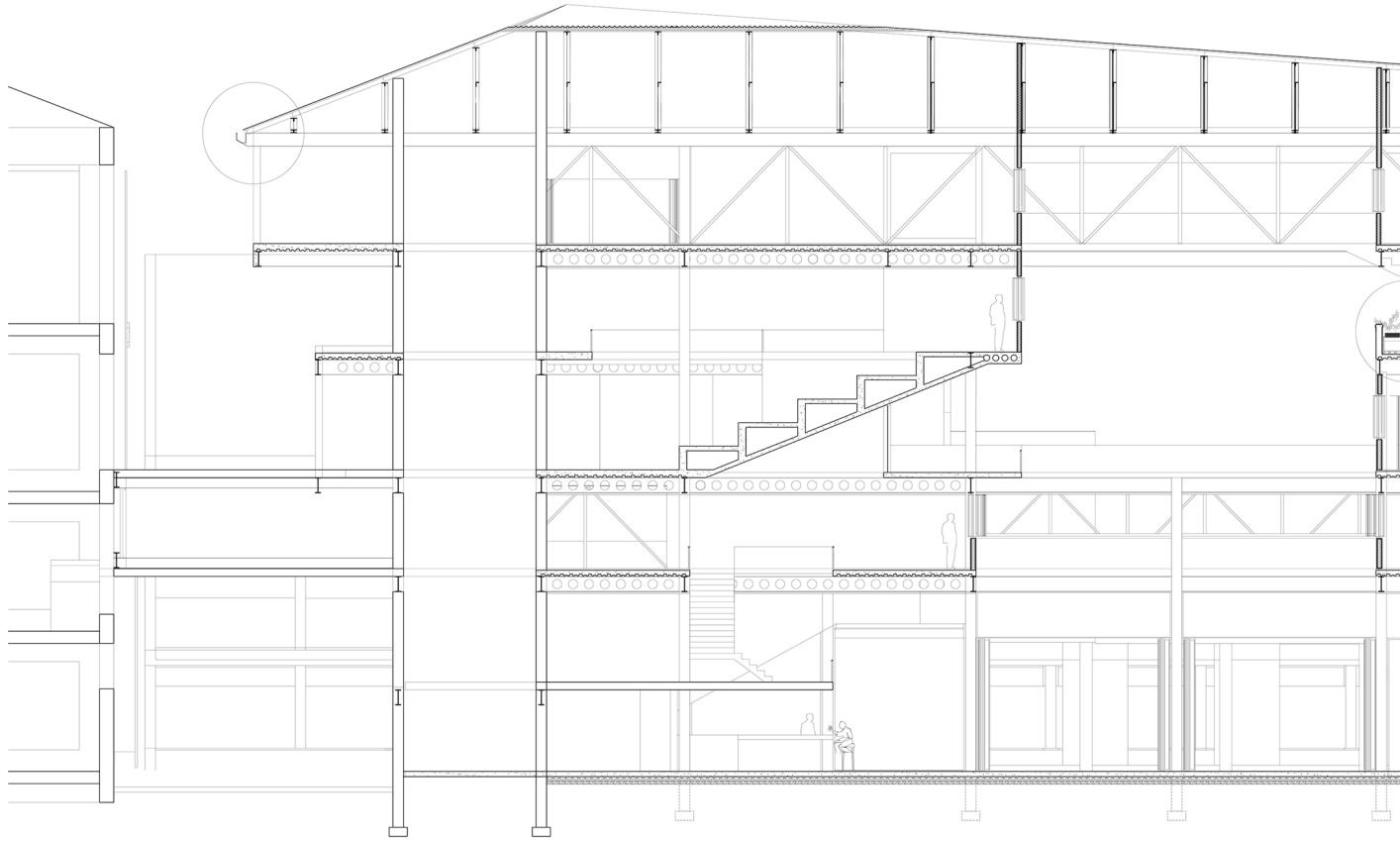
ground floor plan 1:200



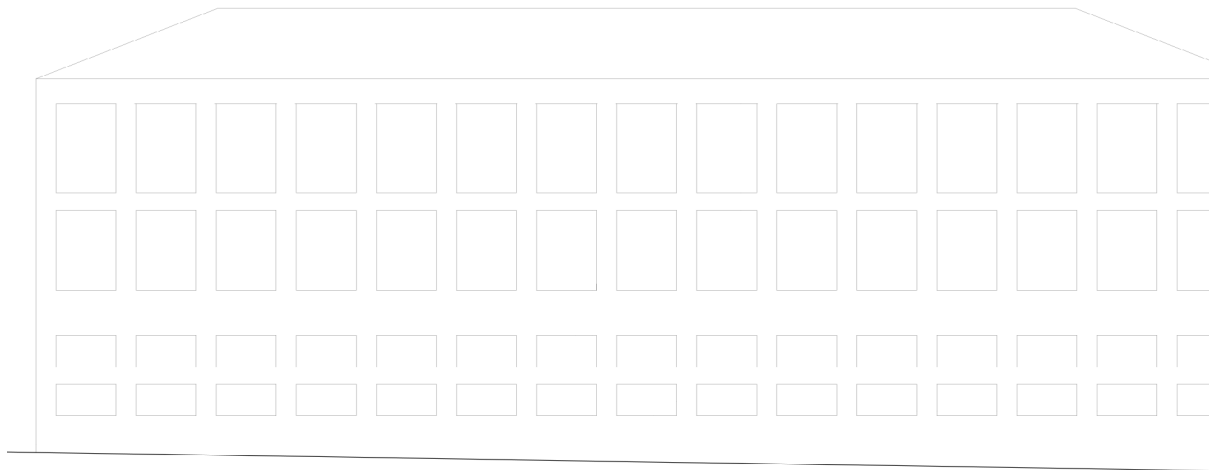
7.10.3 SEPTEMBER TECH CRIT DRAWINGS :

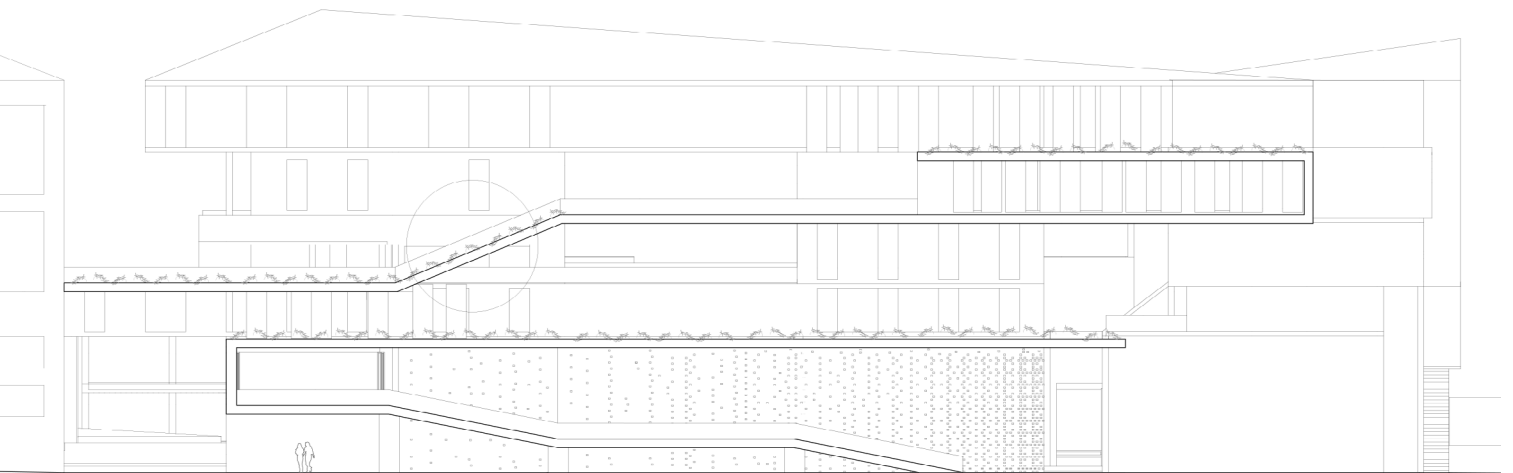
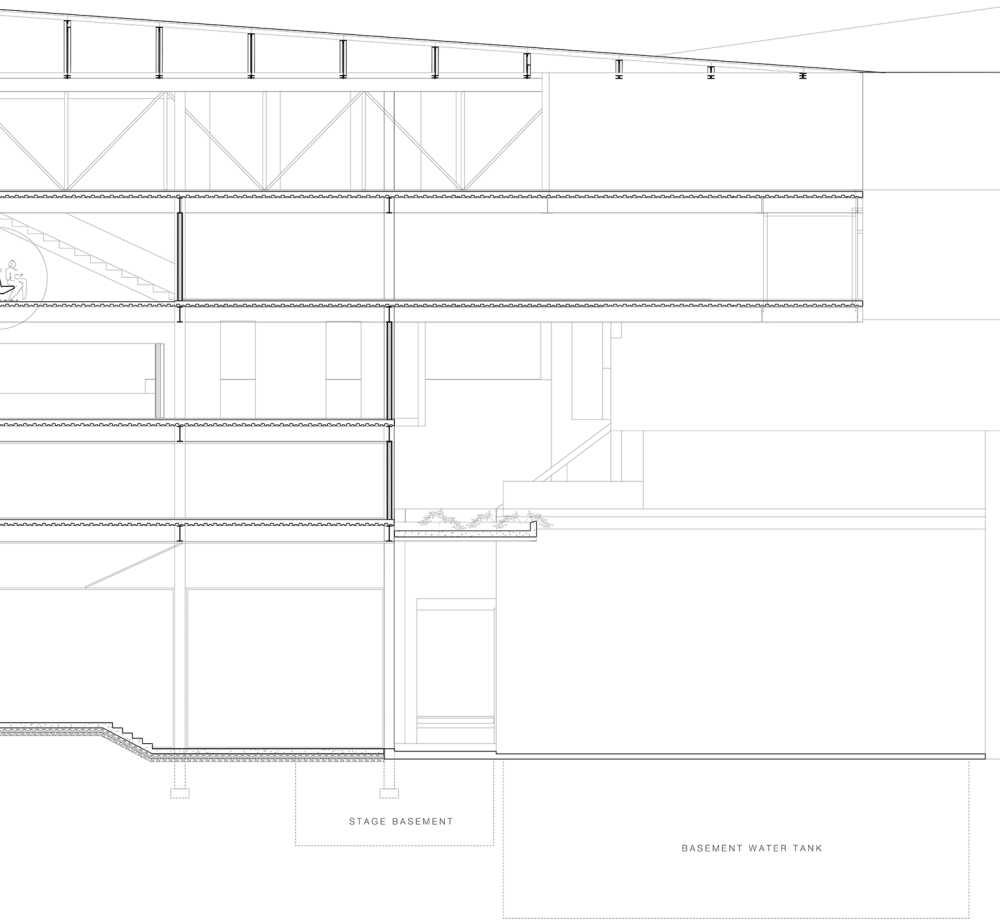






S e c t i o n B - B





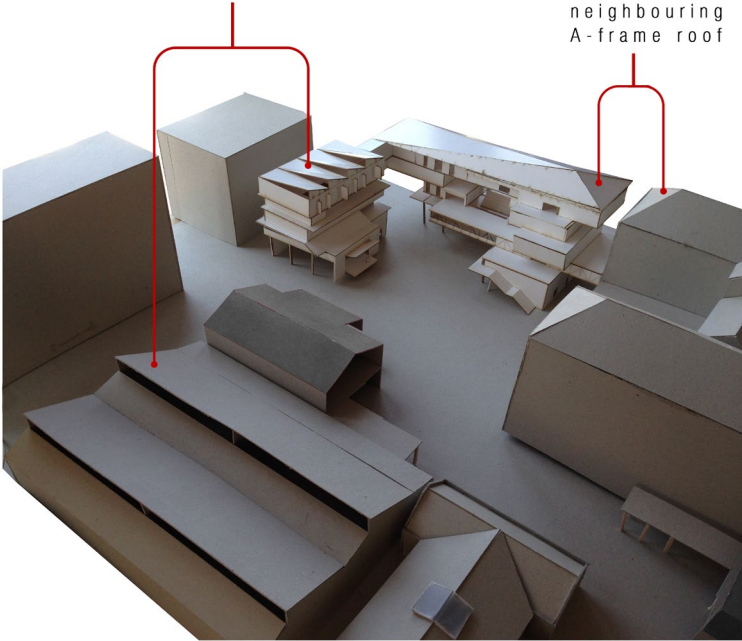
N o r t h e l e v a t i o n



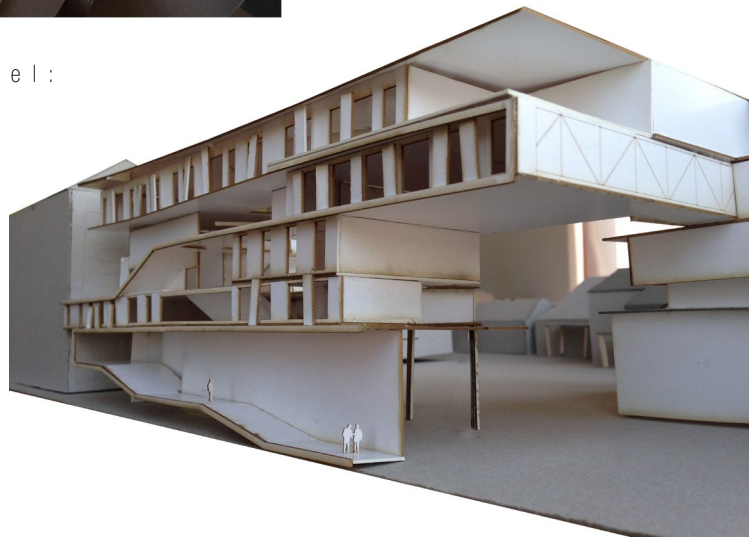


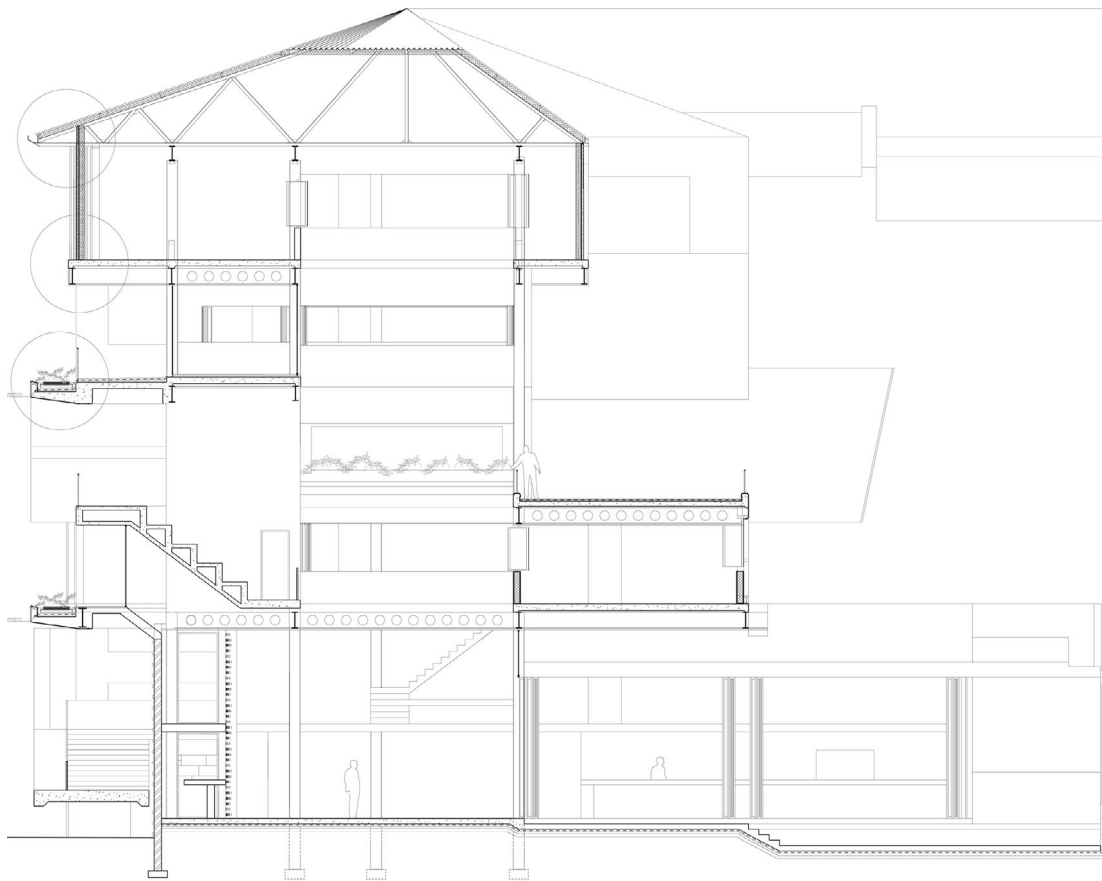
Responding to  
neighbouring  
saw-tooth roof

Responding to  
neighbouring  
A-frame roof



September tech crit model:



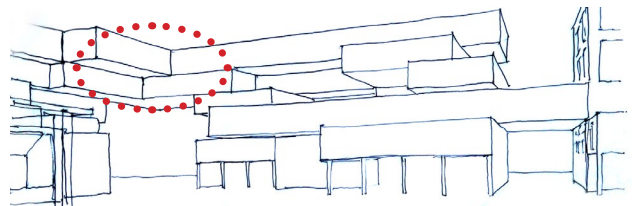


S e c t i o n   A - A

[ MAJOR DESIGN ITERATIONS : ]

1.) Connecting buildings with overhead corner cantilever

- Binds new elements in block together as one
- Defines entrance better



2.) One central open atrium that cuts through building (vertically and horizontally)

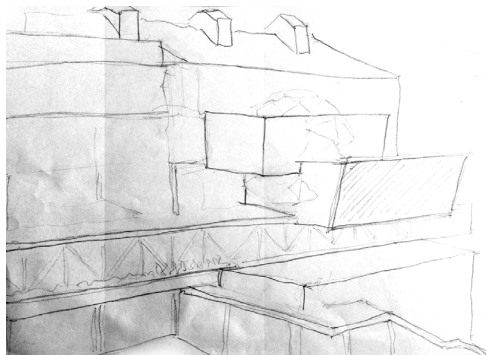
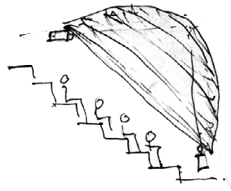
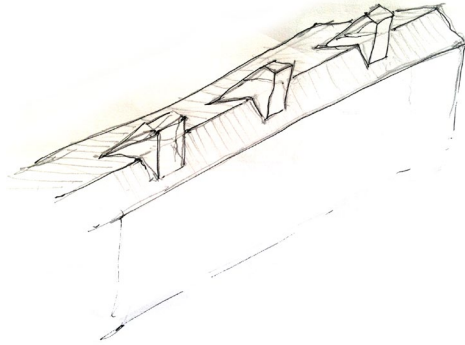
3.) Northern facade freed of exterior columns

- Eliminates vertical line (cage-like) appearance (vertical elements from neighbouring building are rather picked up by proportions of window openings and sliding screens)

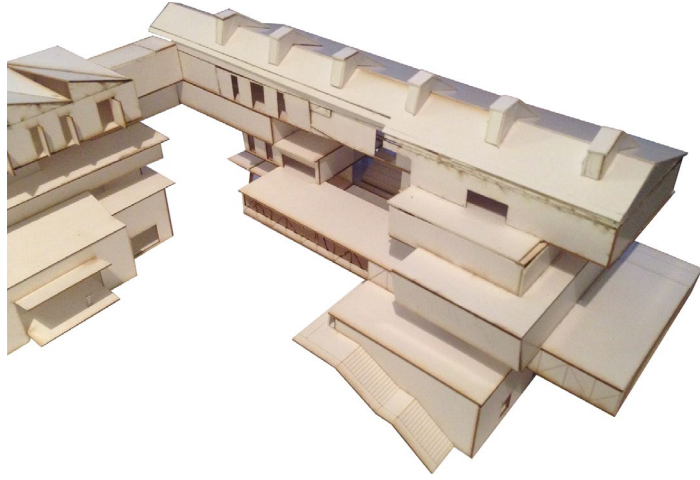
4.) Auditorium structure changed to modular elements that can change to different configurations instead of one static concrete element

- Accommodates many more functions and change in uses

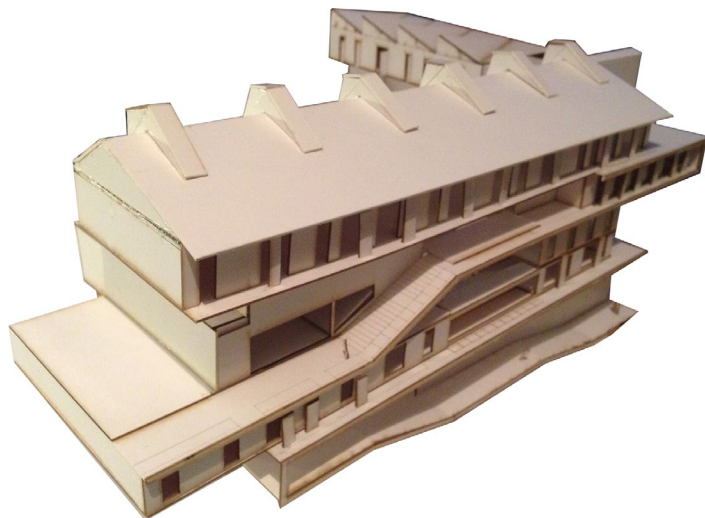
5.) Roof iterations

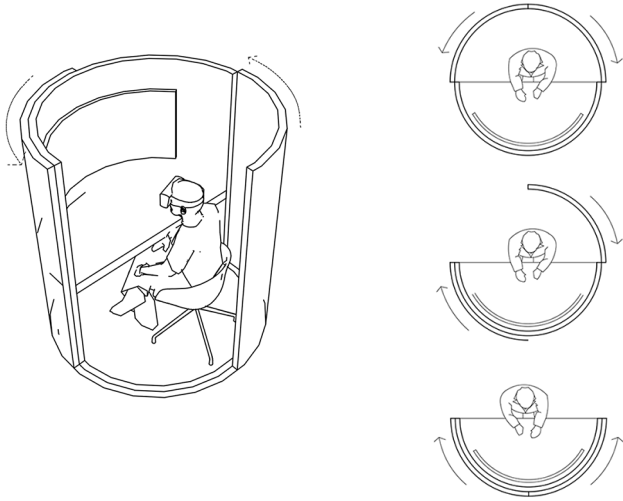


7.11 FINAL DESIGN DEVELOPMENT - END OF OCTOBER



R O O F   W I T H   S T A C K   V E N T I L A T O R S

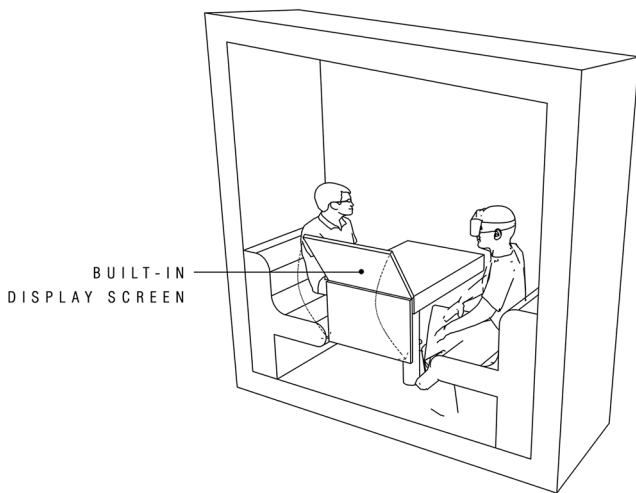




T.E.L. [TECHNOLOGY-  
ENABLED-LEARNING]  
PODS

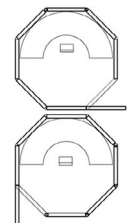
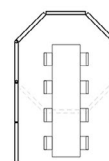
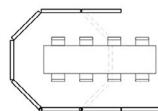
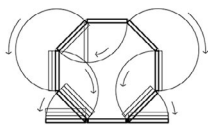
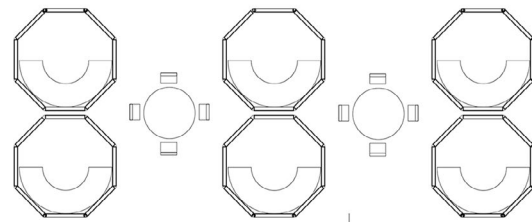
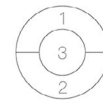
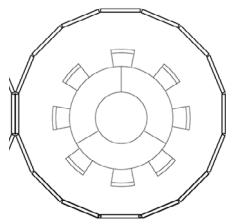
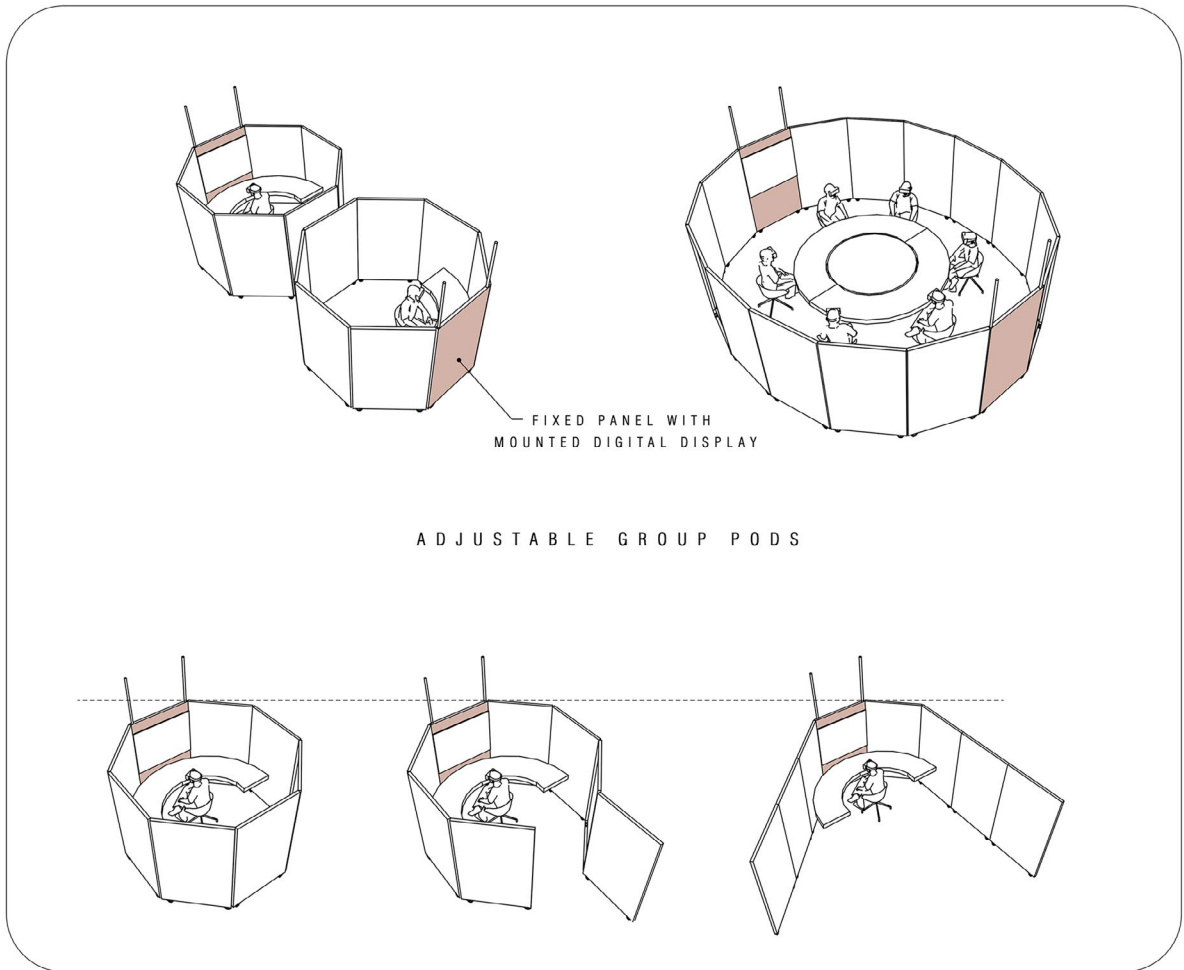


HAMSTER-WHEEL  
WALKING WORKSTATION

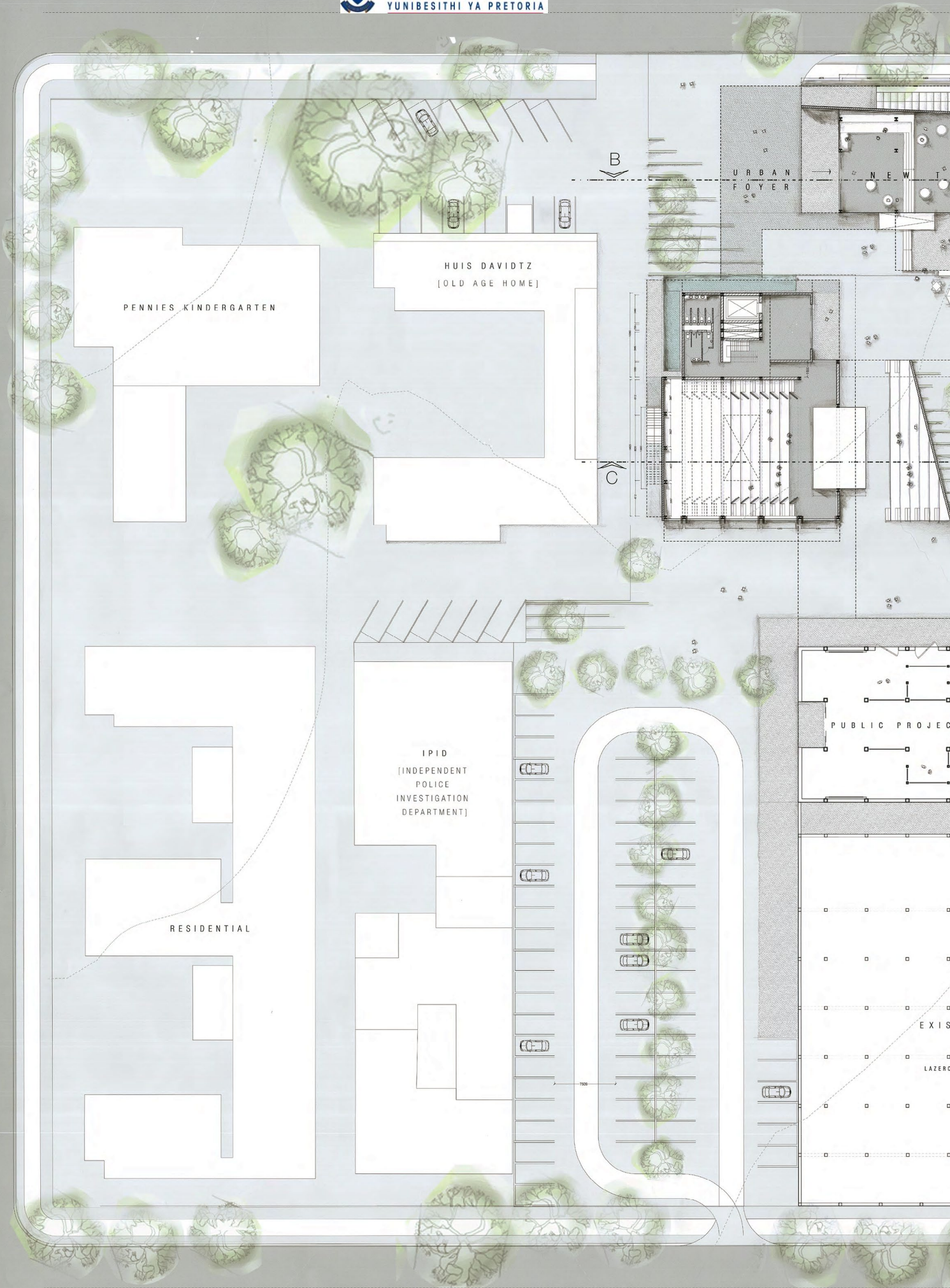


T.E.L. MEETING PODS

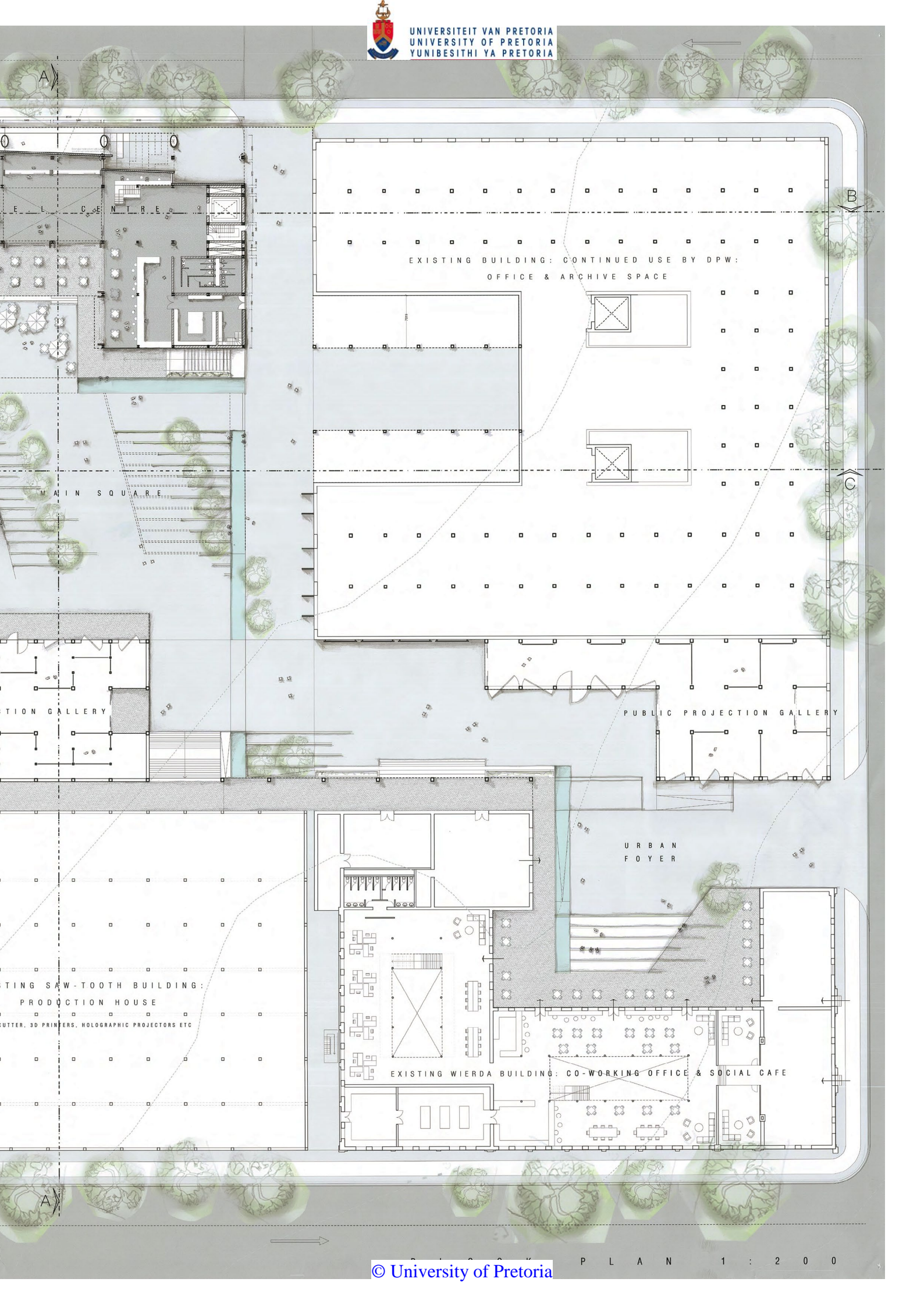




ADJUSTABLE GROUP POD - PARTITION CONFIGURATIONS



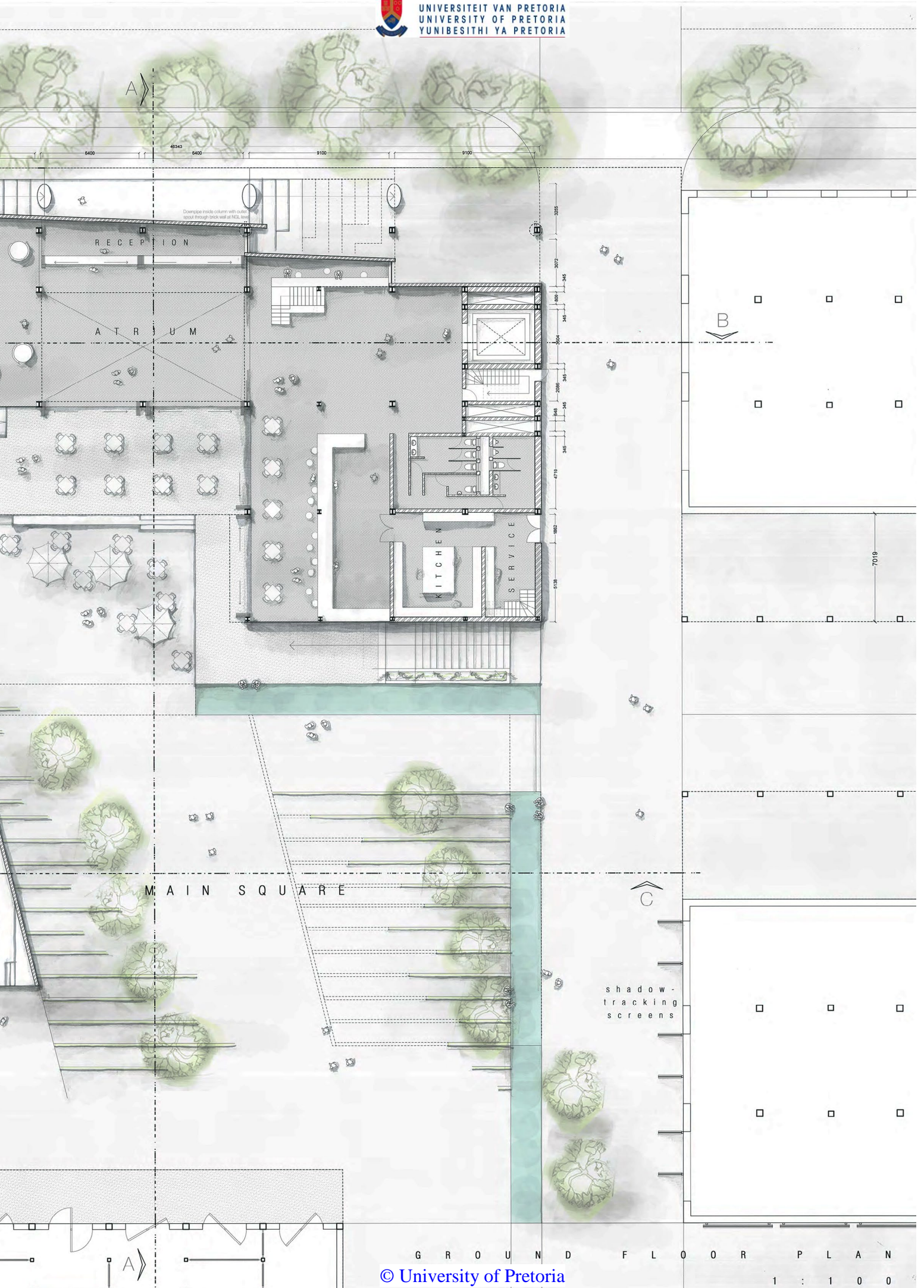




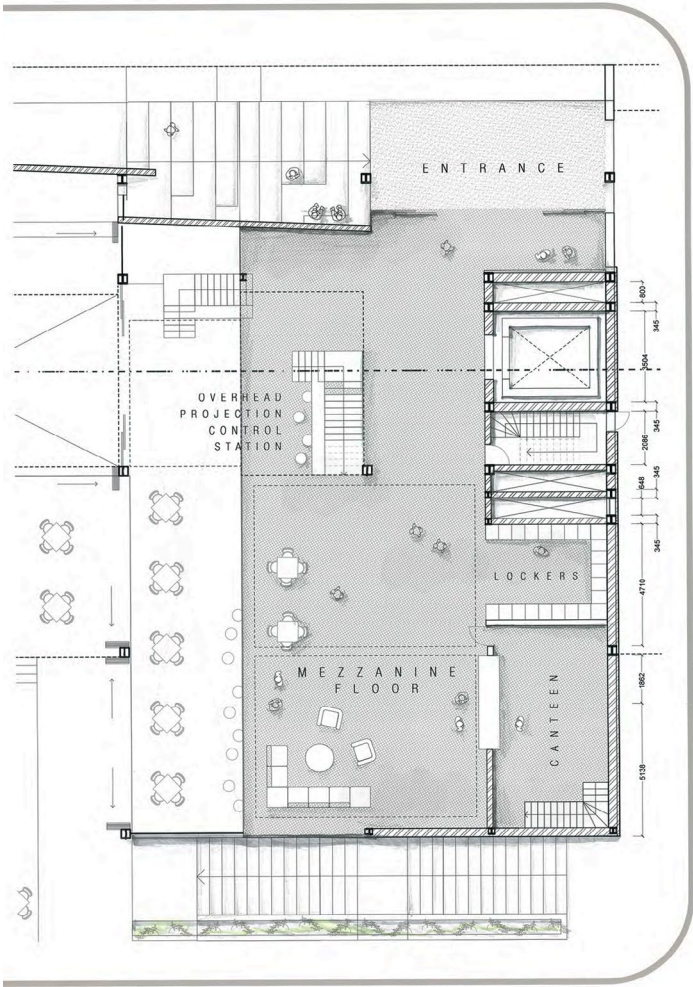




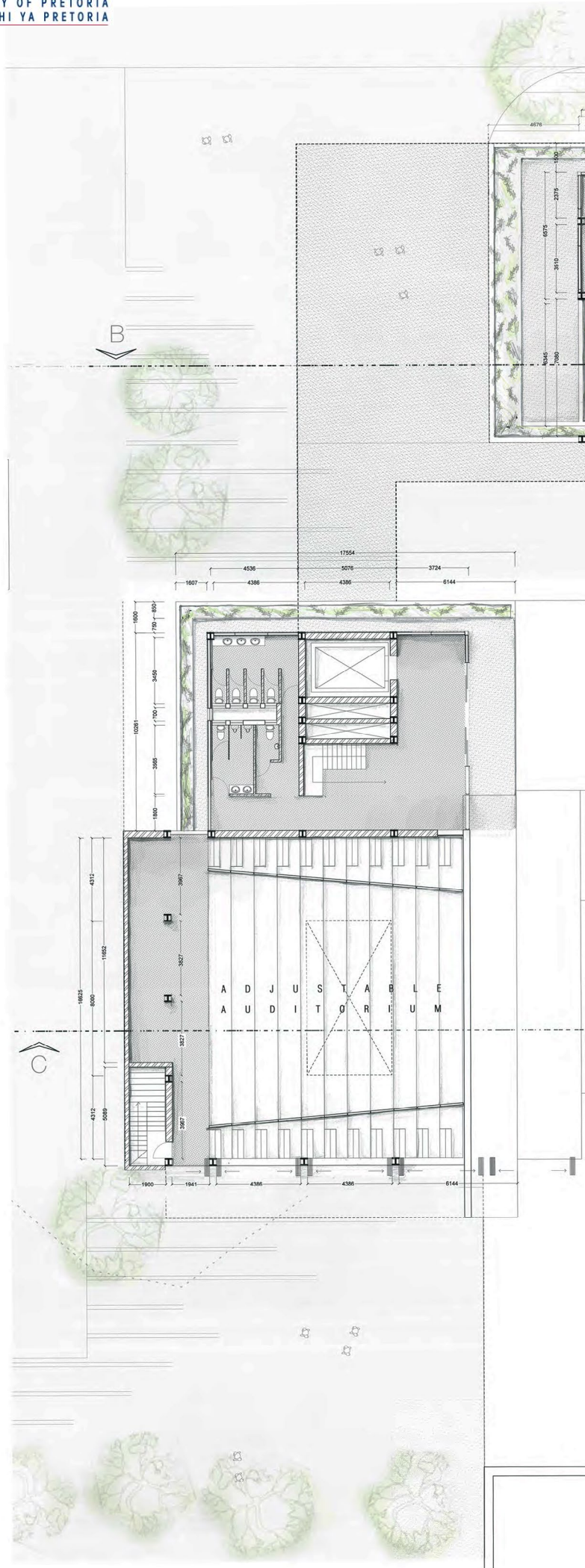




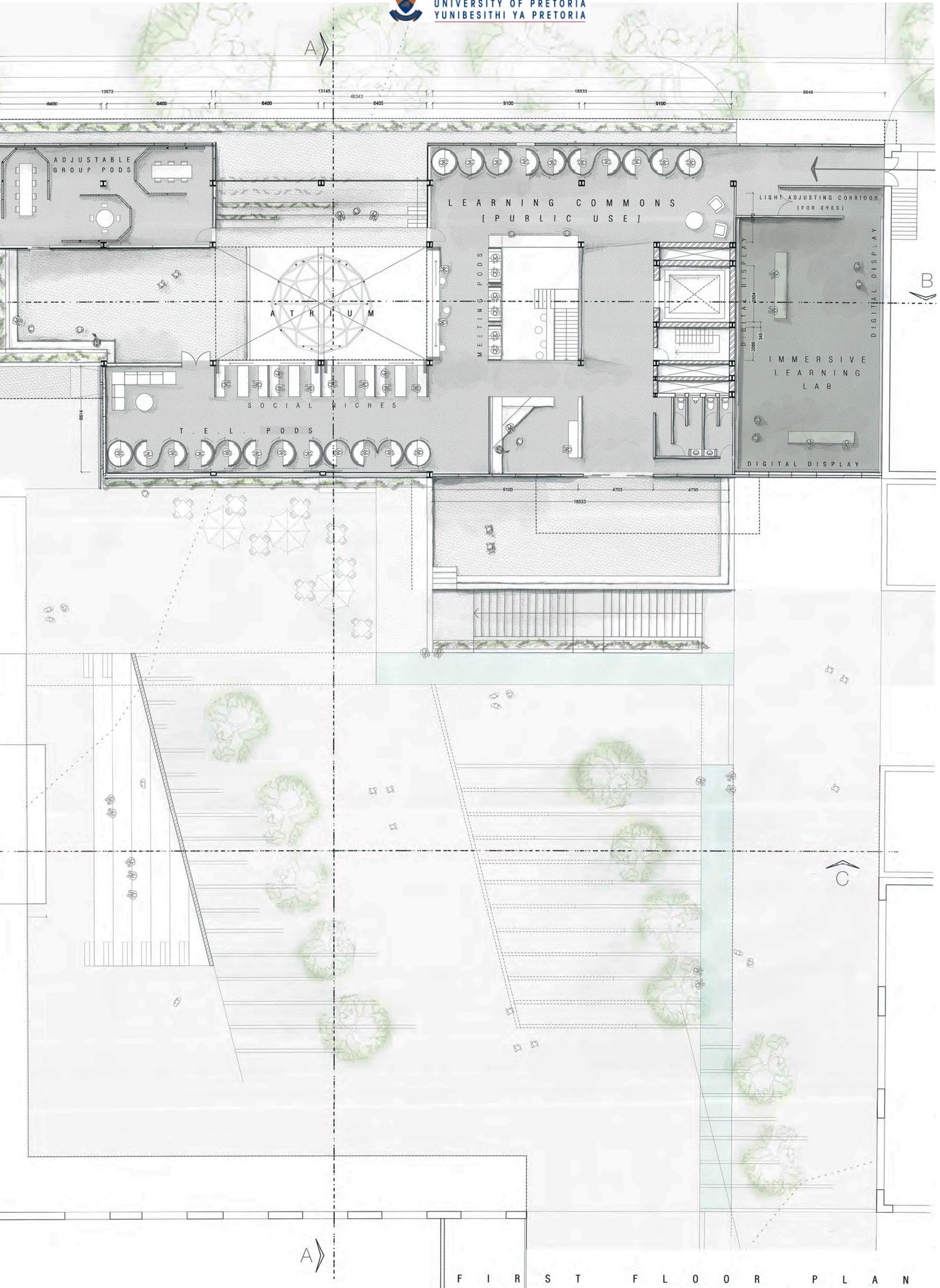




M E Z Z A N I N E  
F L O O R P L A N  
1 : 1 0 0

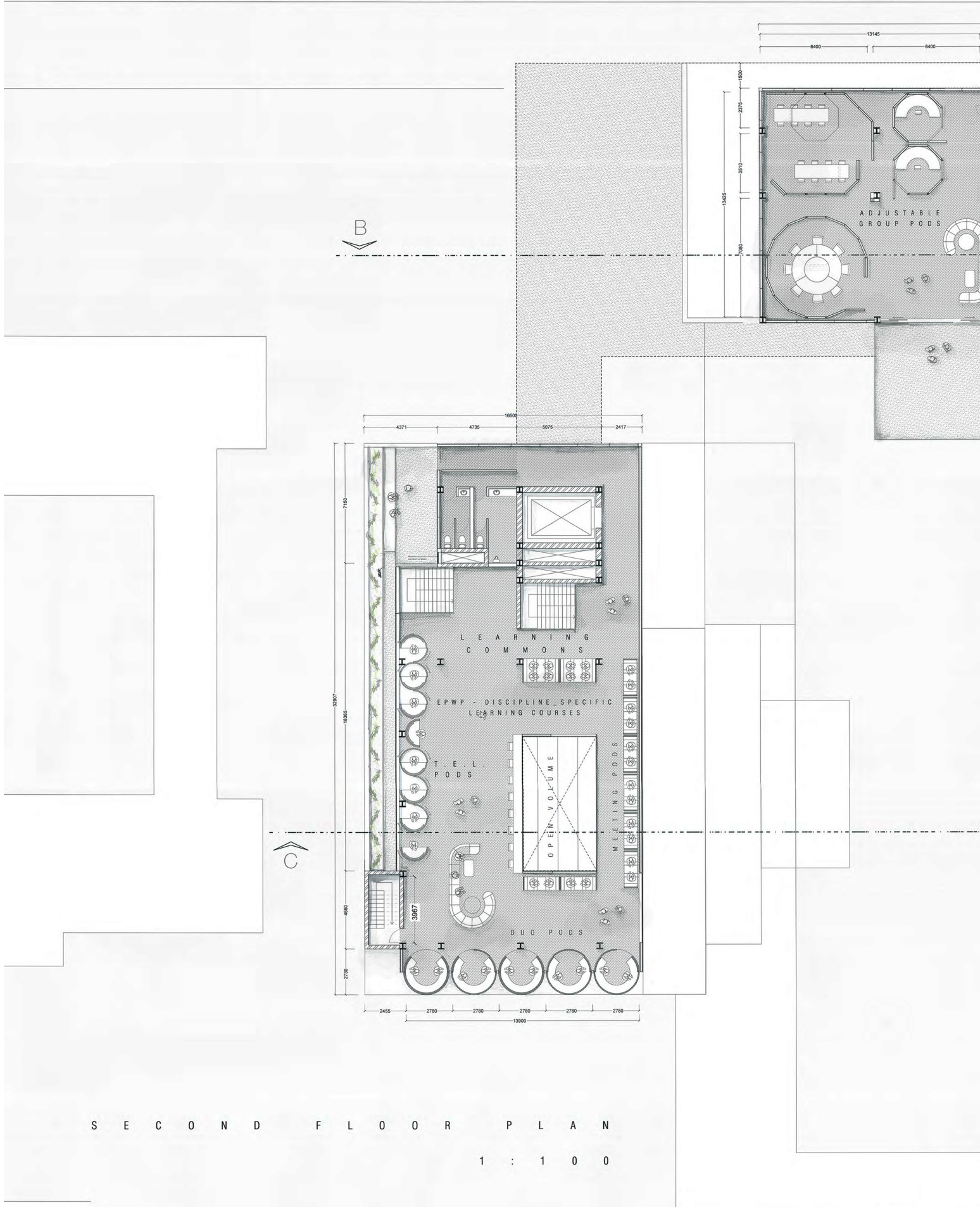




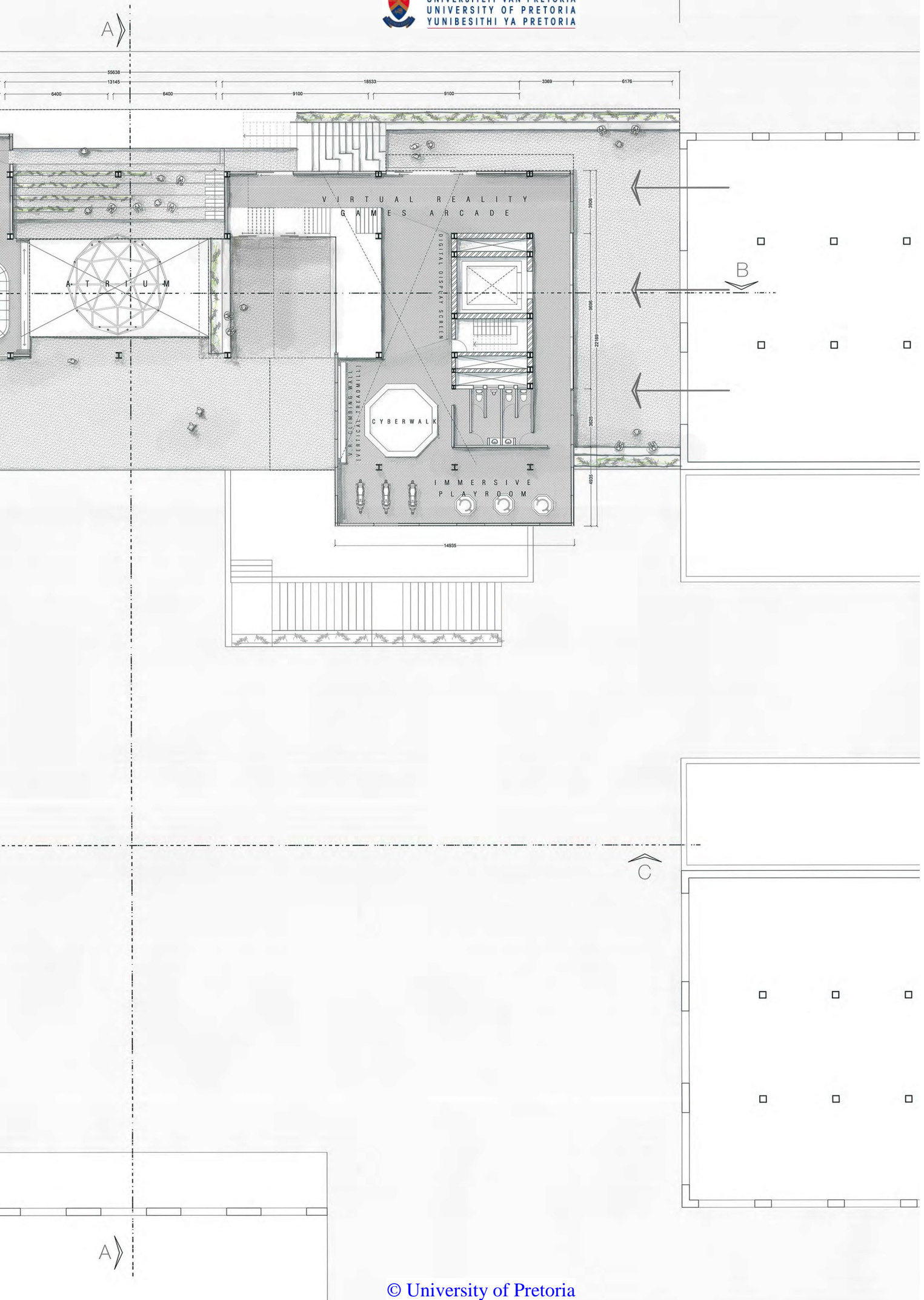


F I R S T F L O O R P L A N

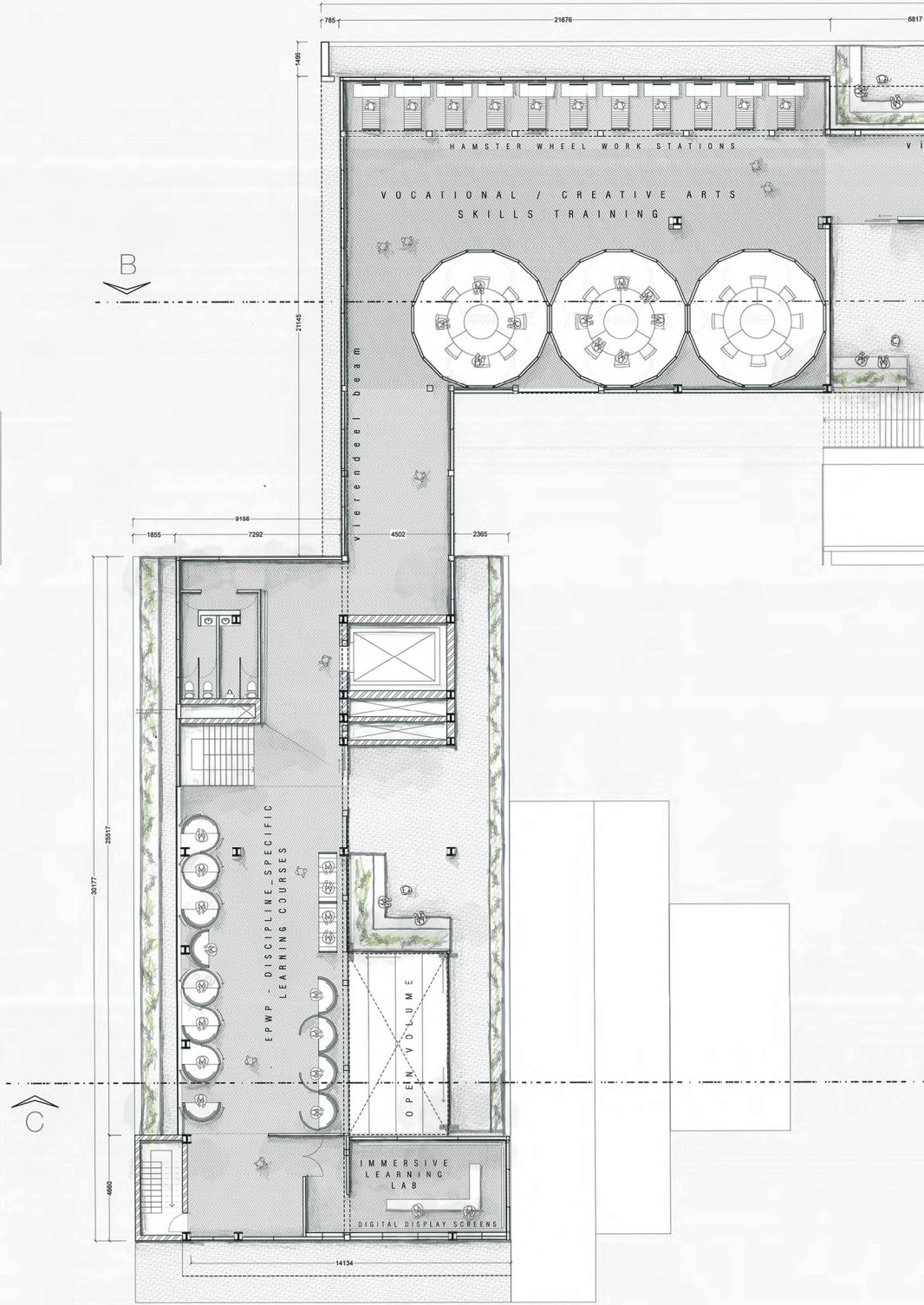




S E C O N D F L O O R P L A N  
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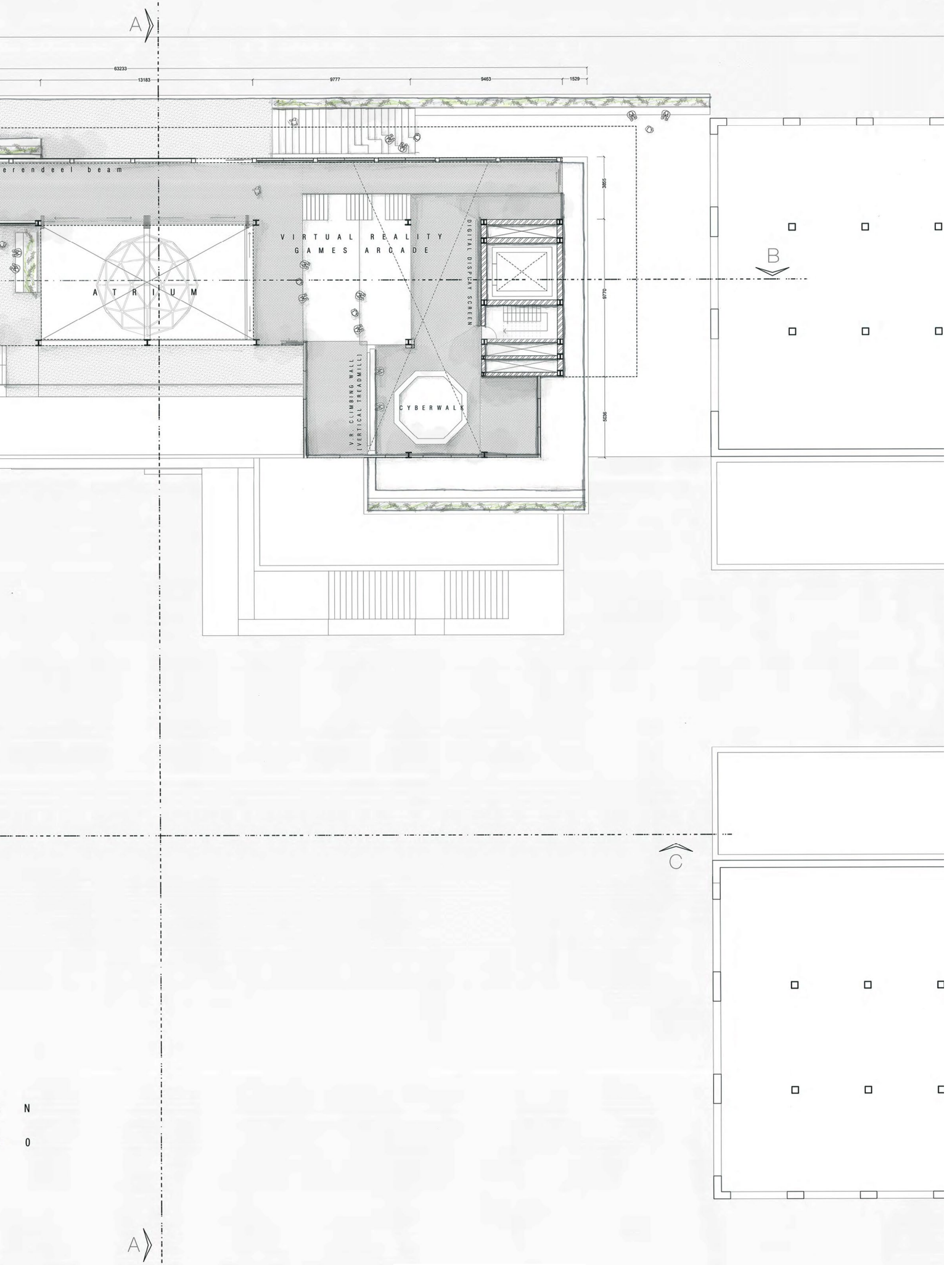


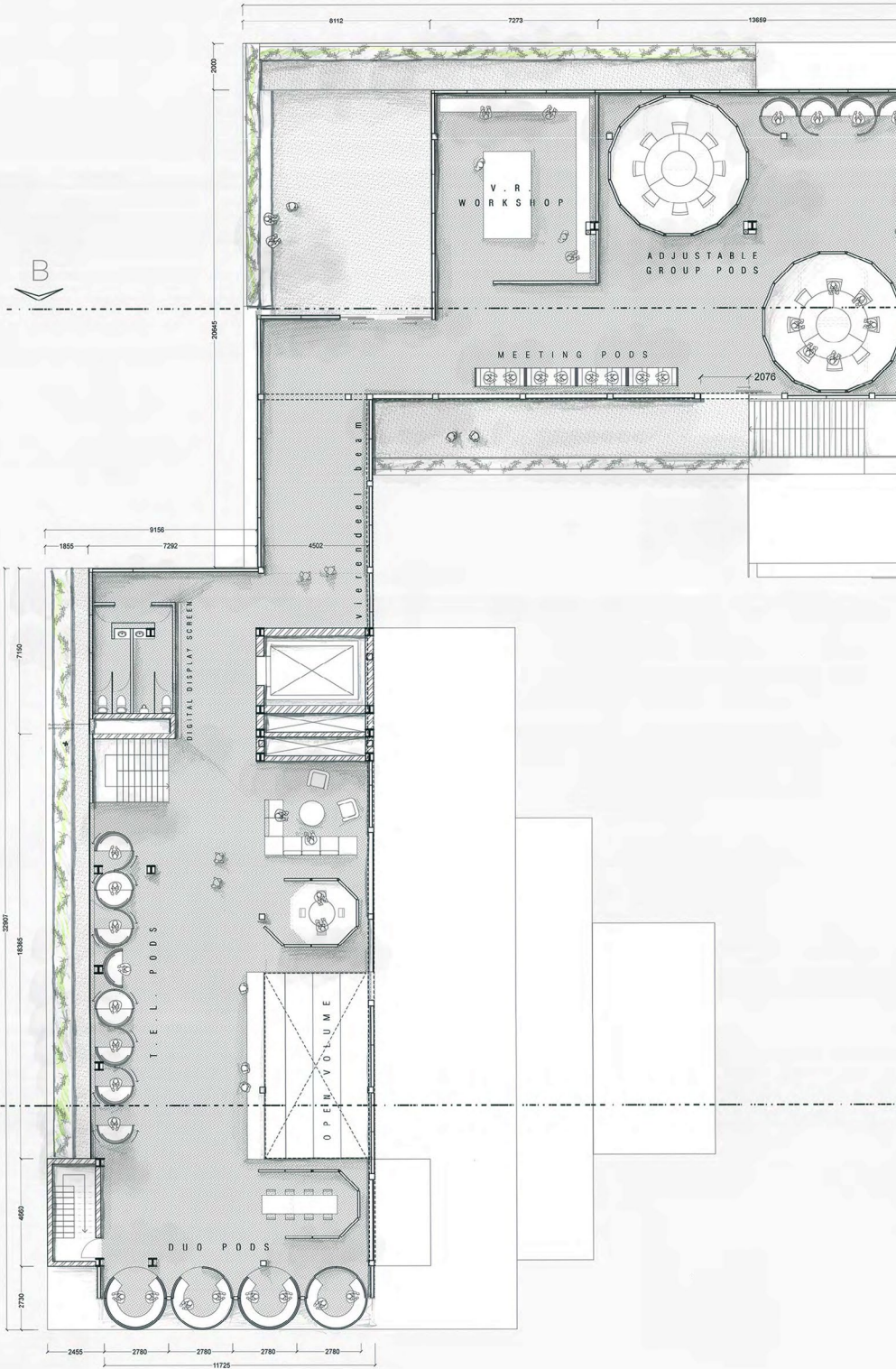


T H I R D F L O O R P L A

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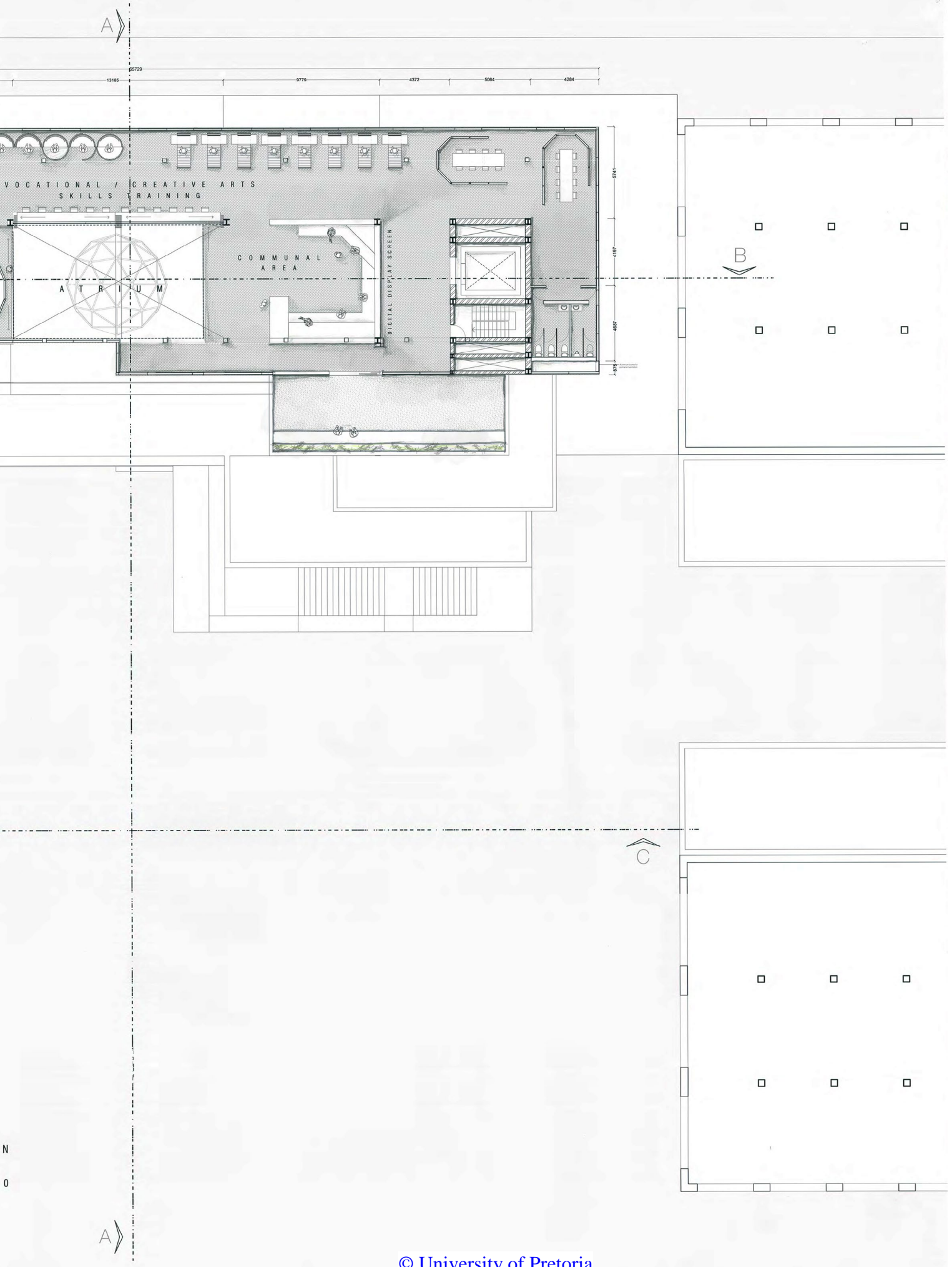


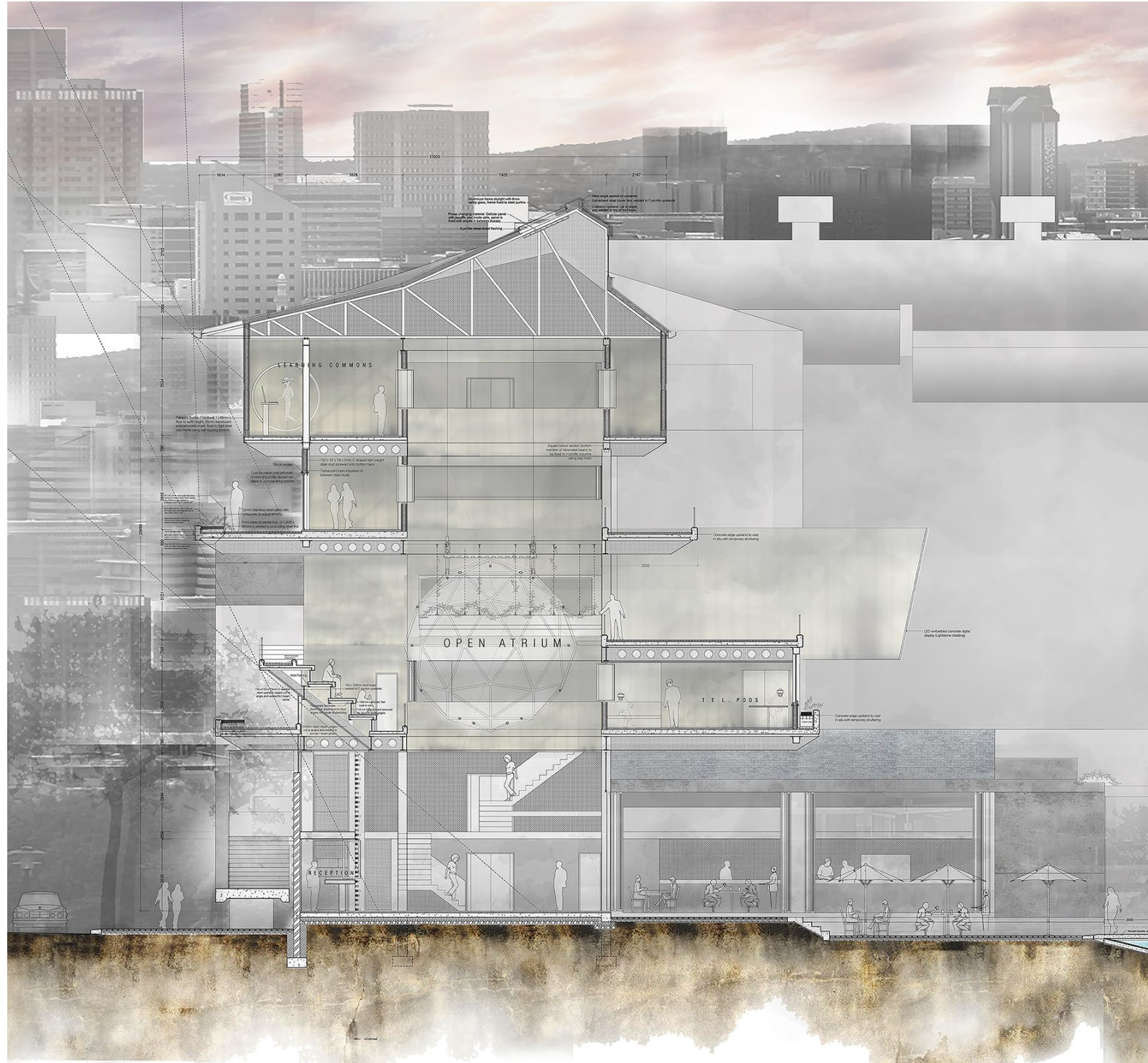


F O U R T H F L O O R P L A

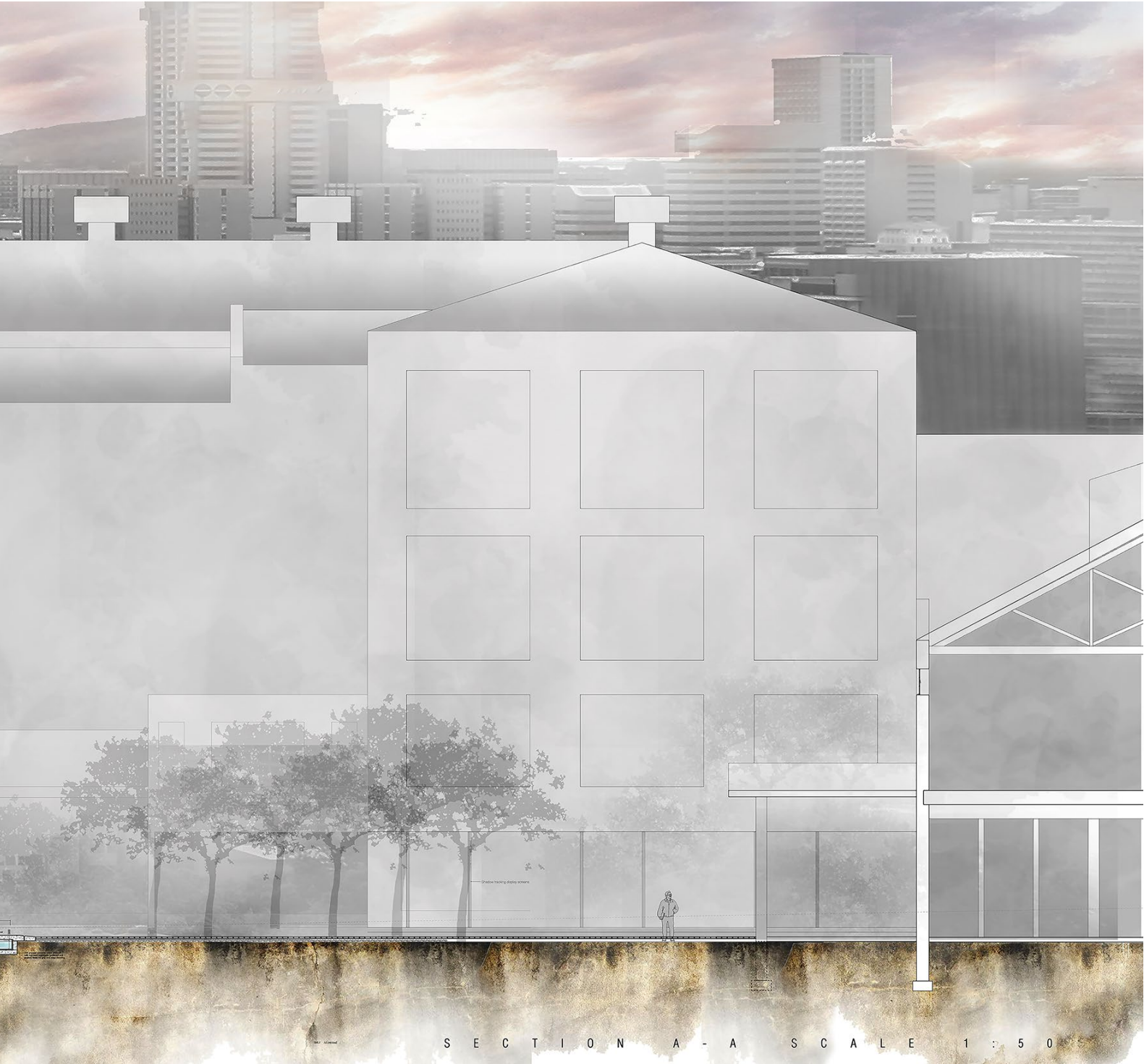
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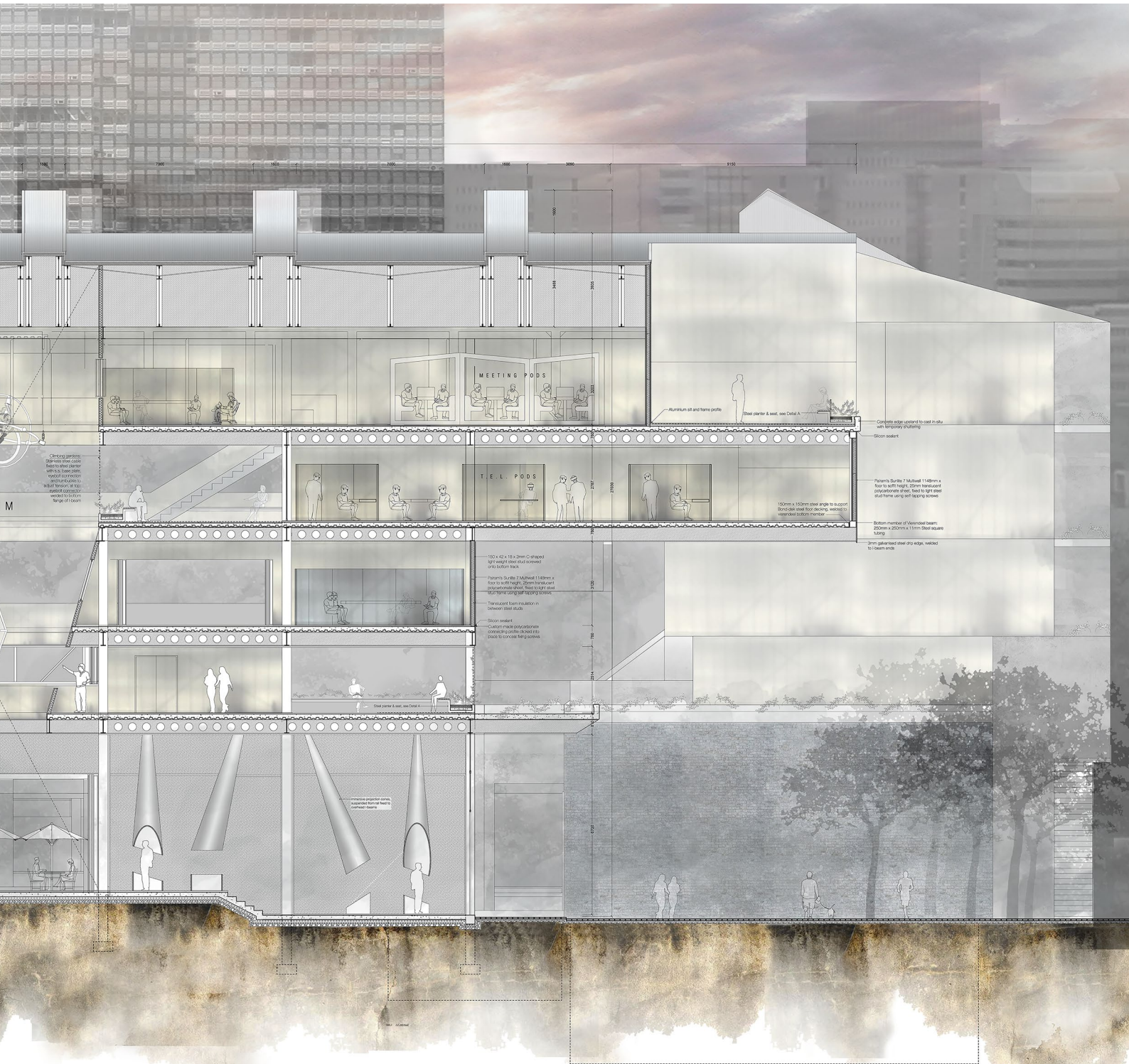


S E C T I O N A - A S C A L E 1 : 5 0

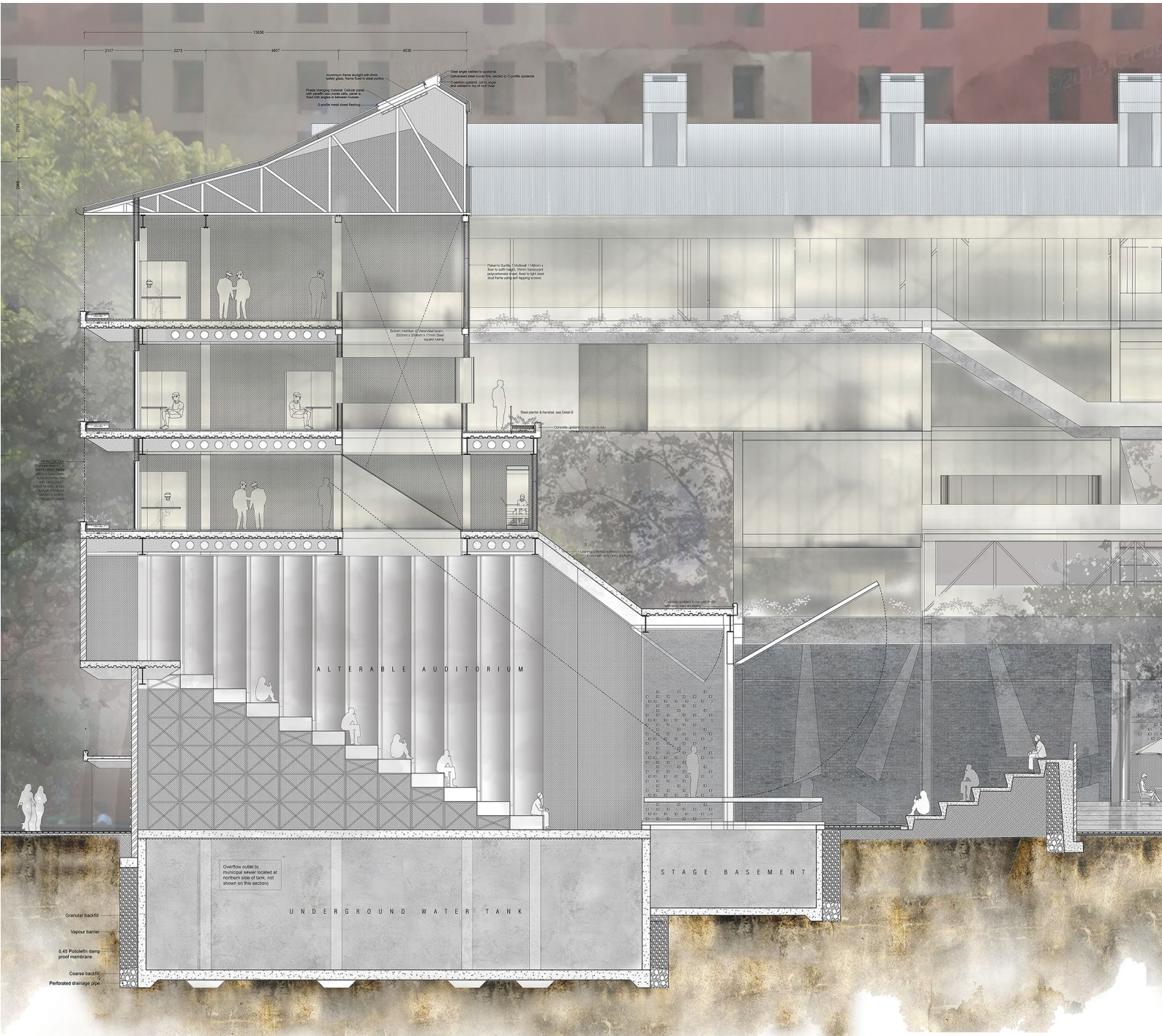




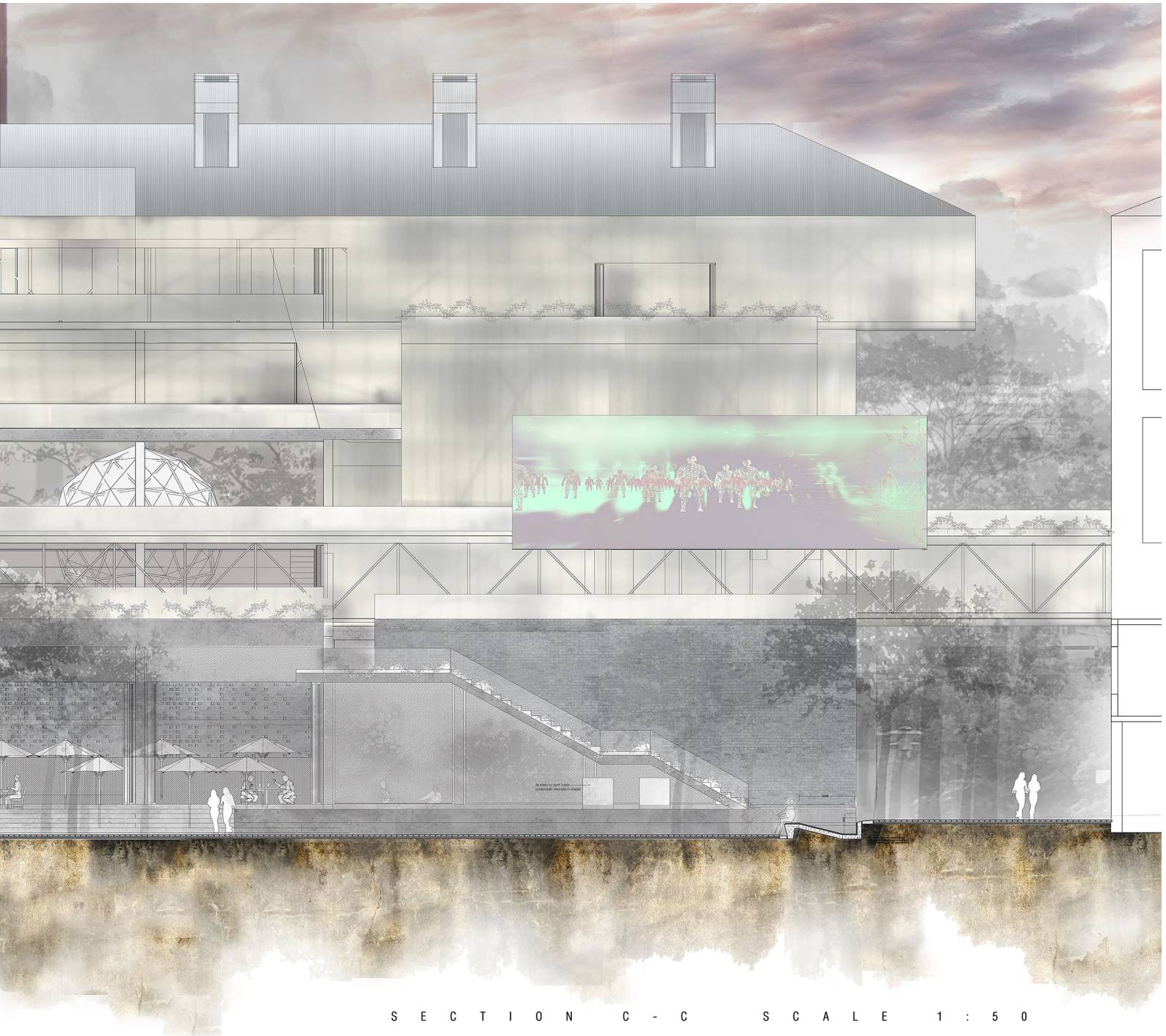




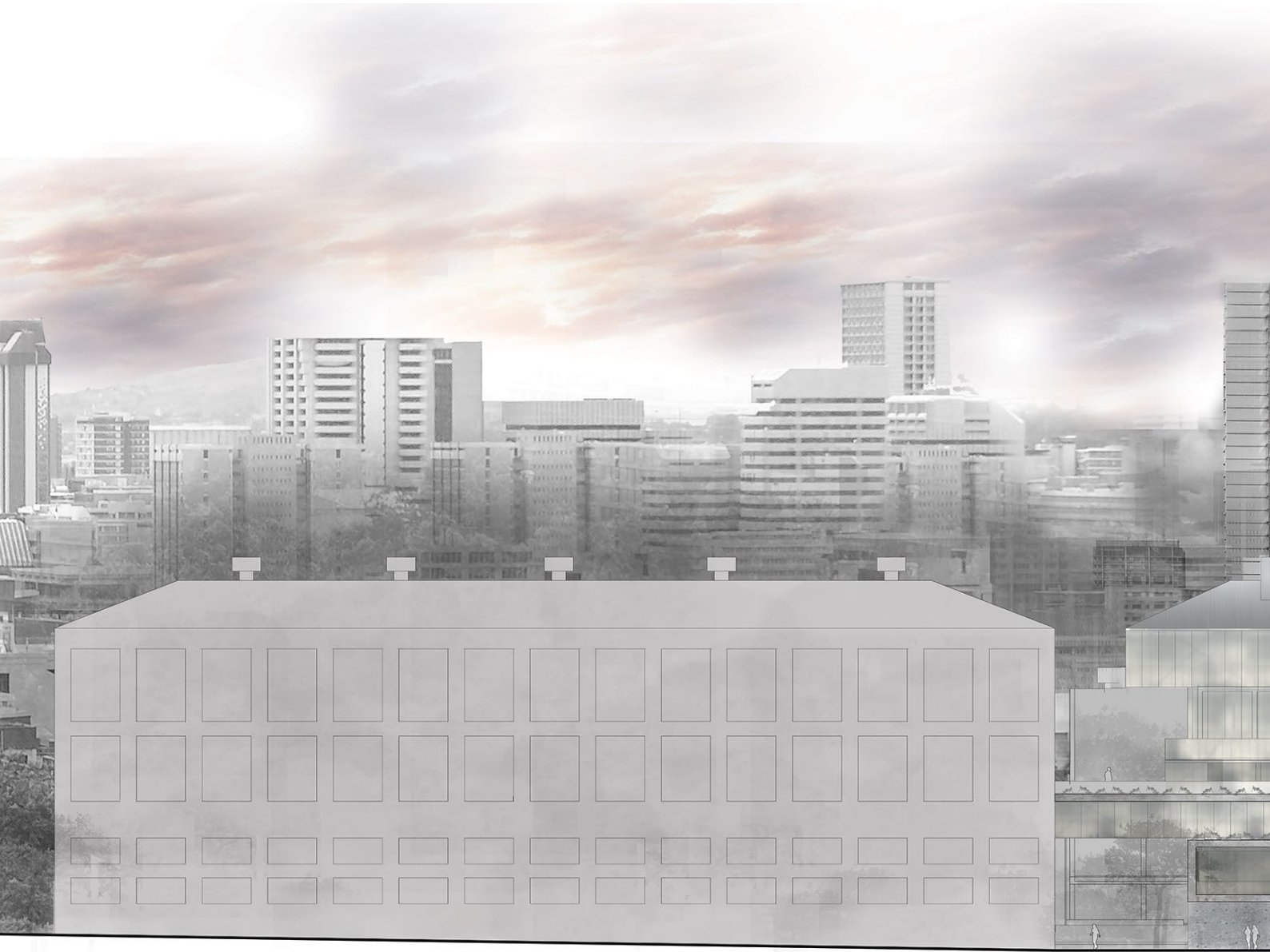




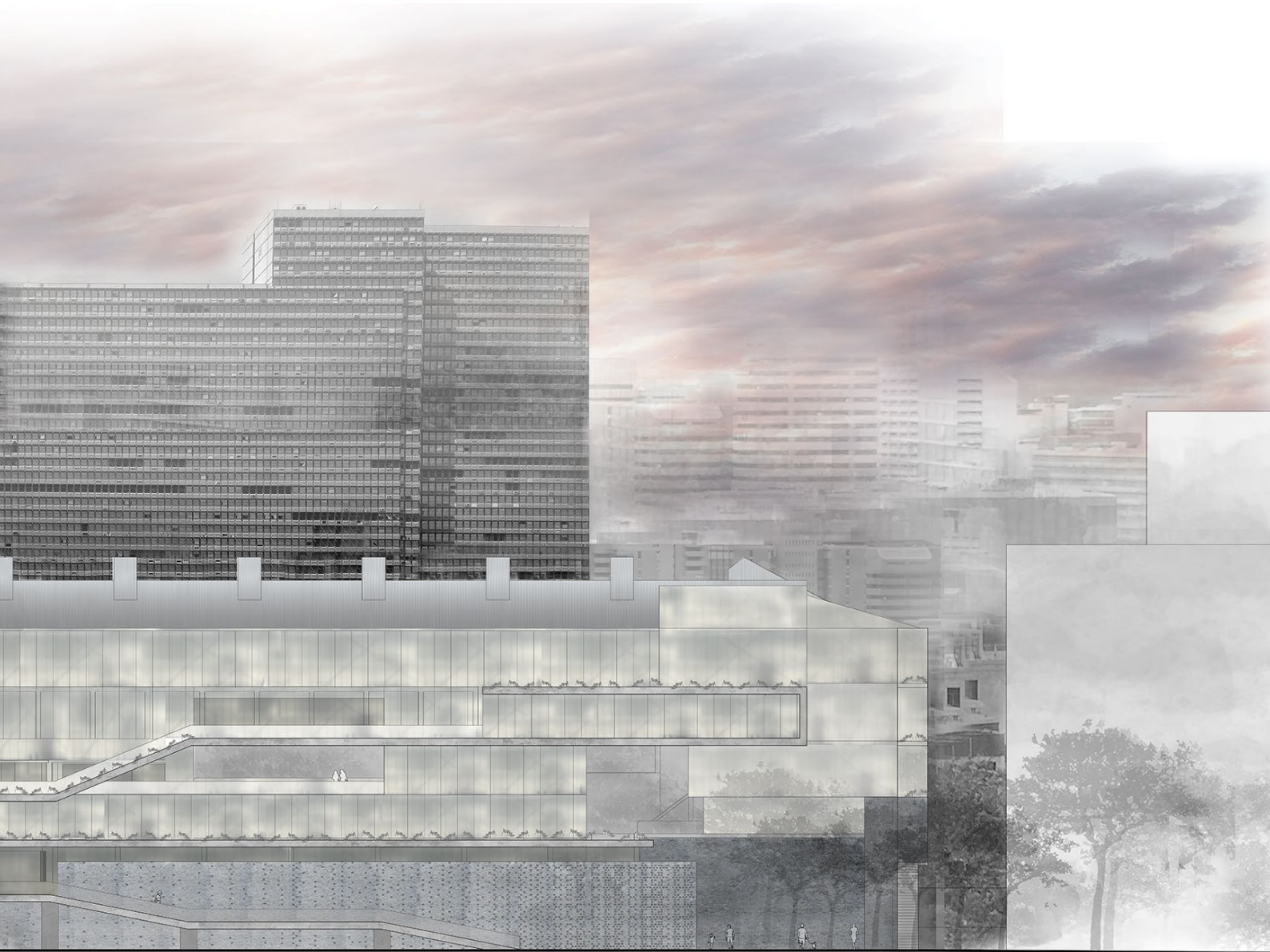




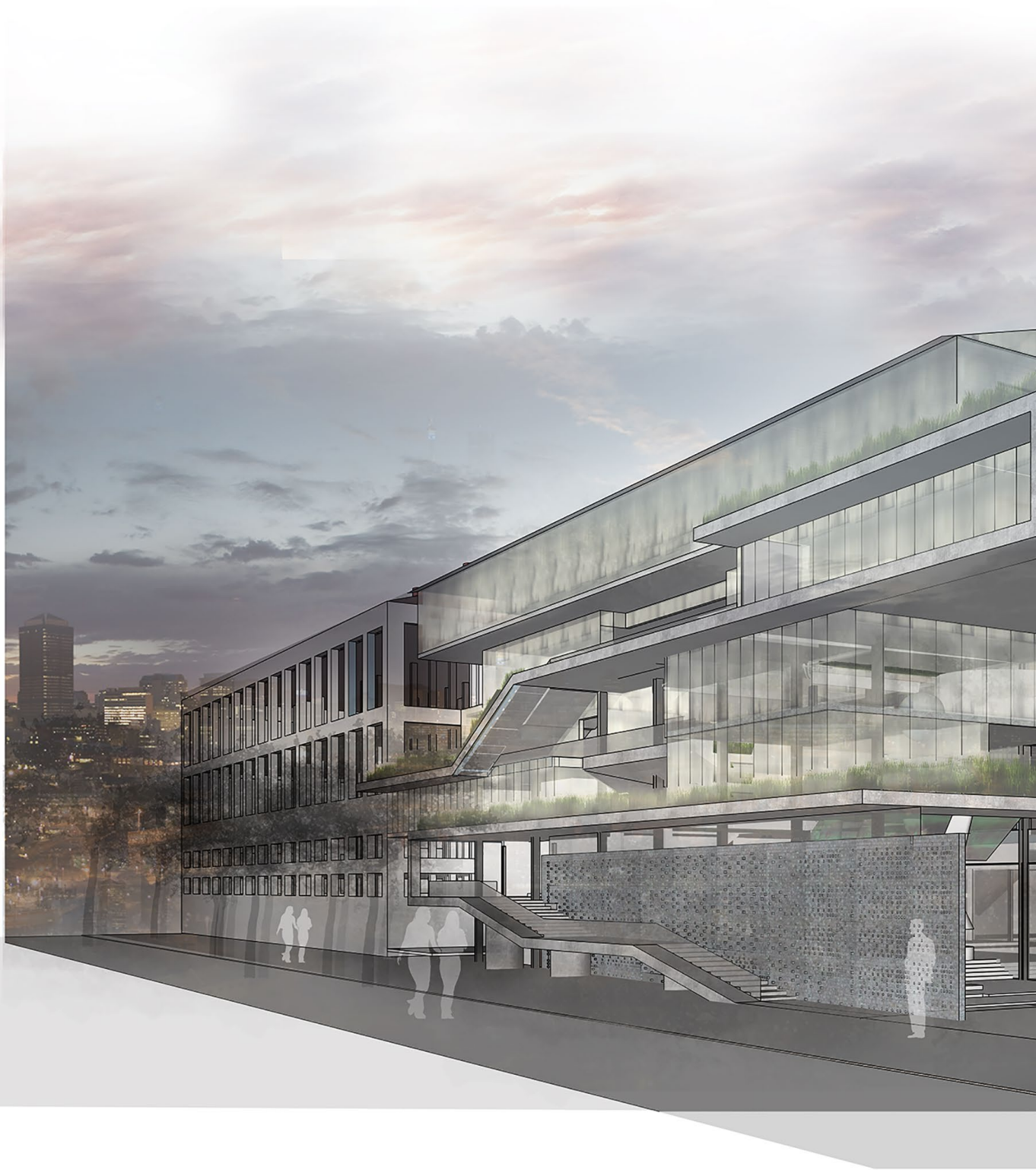
S E C T I O N C - C S C A L E 1 : 5 0







N O R T H   E L E V A T I O N







N O R T H - W E S T E R N E N T R A N C E







